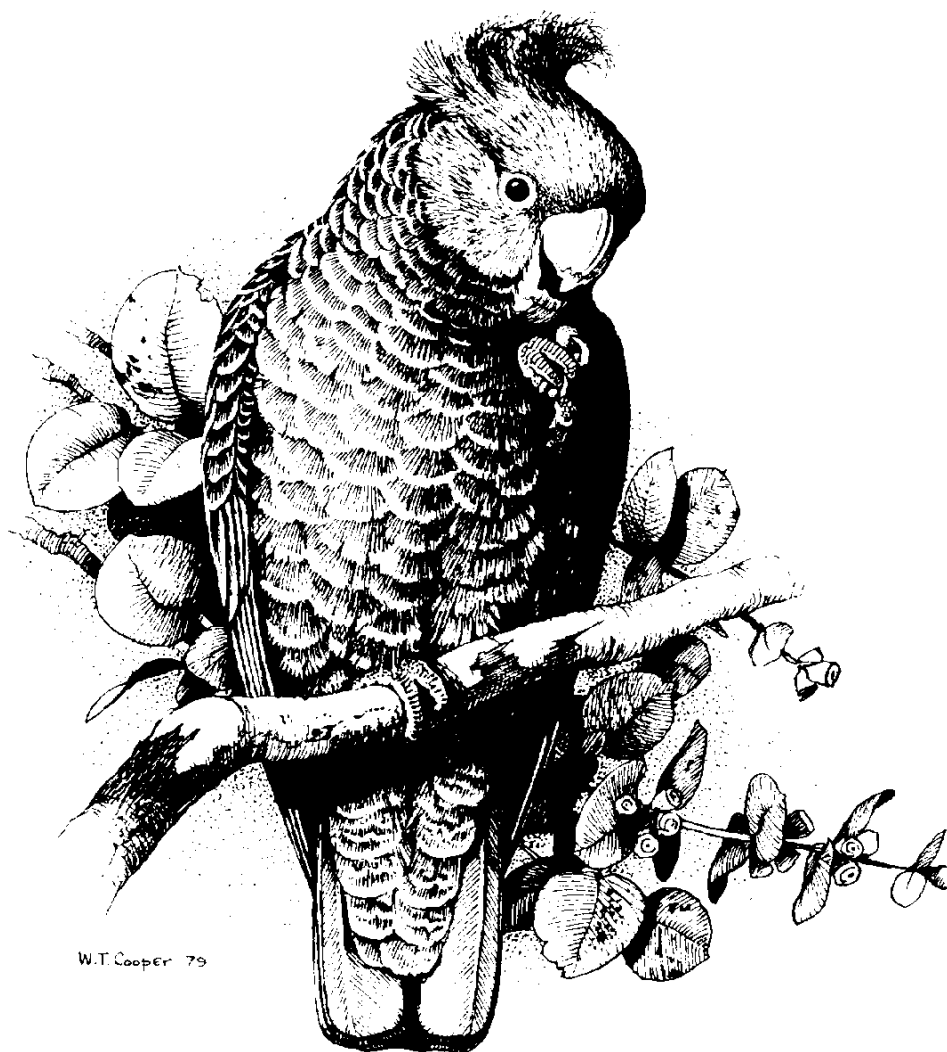


# canberra bird notes

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<http://canberrabirds.org.au/>

## ARTICLES

### THE CANBERRA BIRD BLITZ 2013

BARBARA ALLAN

*47 Hannaford St, Page, ACT 2614*

**Abstract.** *This paper describes the conduct of the Canberra Ornithologists Group's ninth 'bird blitz', held on 26-27 October 2013, outlines some findings and provides comparisons with the eight previous blitzes.*

#### Introduction

On the last weekend in October 2013 (Saturday 26 and Sunday 27), the Canberra Ornithologists Group (COG) held its ninth annual 'bird blitz'. In this exercise, we aim to record all species of wild bird present in the ACT over that weekend, to obtain a broad indication of their abundance, and to record breeding status. To achieve this, we set out to conduct a minimum of one 20-minute 2-hectare survey within each of the 165 grid cells covering the ACT (a 2.5-minute grid on lines of latitude and longitude, so each cell measures approximately 3.5 km by 4.5 km). A subsidiary aim of this exercise is to encourage more of our members to get out, survey and submit datasheets.

The data collected are entered in the COG Atlas database, and subsequently contributed to the BirdLife Australia Atlas database. They are available for scientific purposes and as an input to Canberra land use planning.

#### Conduct of the blitz

Participants register for their preferred locations or grid cells, on a first-in, best-dressed basis. In the allocation process, some site preference is given to members who survey given sites on a regular basis. More tardy volunteers are cajoled by the organiser into surveying the remaining sites. Less experienced birders may accompany more experienced birders who indicate a willingness to take them along. And as a modest inducement to participants, a variety of prizes are on offer, courtesy of our members.

Participants are allowed to choose their preferred methodology from the three BirdLife Australia Atlas options: a 20-minute/2-ha survey; within 500 m of a central point, for >20 mins; or within 5 km of a central point, for >20 mins. Incidental records are also welcomed.

Results and discussion

#### *Operational issues*

We enjoyed fairly good birding weather, with mild conditions after a frosty start, pleasant sunshine and just a modest breeze in the afternoon. Not all trails in Namadgi National Park were accessible, however, so coverage of the Park was spotty.

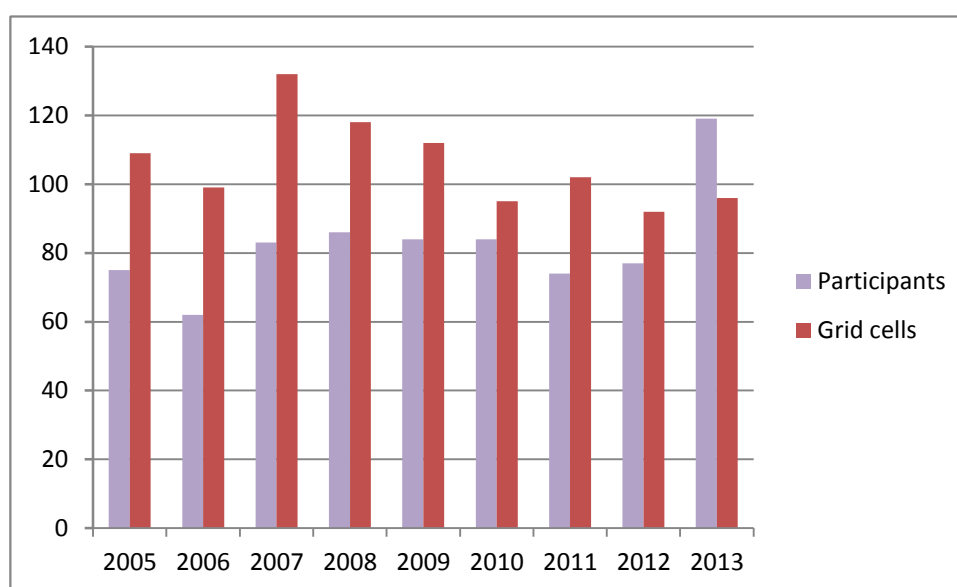
For the first time, we ran two "training sessions" for newcomers to the bird group, involving an explanation of how the survey worked and how to complete the datasheets. And for newcomers to birding, a training visit to a local oval was included. Also previous non-blitzers

were sent reminder letters with an invitation to participate – a ploy which flushed out a handful of additional blitzers.

### *Level of participation and coverage*

At least 119 COG members and friends took part in the 2013 blitz, plus a number of unnamed “extras” (a list of known participants is at Table 1). As noted before, this probably equates to about 140 participants if the ‘number surveying’ box on the datasheets is taken into consideration. Thirty-five of the named individuals, the majority having taken part in the training sessions, participated for the first time. And thirty-five participants blitzed for part or all of both days.

Datasheets were received from ninety-six grid cells, a little fewer than average. This can be partly explained by the lack of access to certain areas in Namadgi National Park. Nevertheless the grid cells surveyed covered most habitat types, so I believe we have a representative sample of ACT avifauna for the weekend. Map 1 shows the grid cells covered, while the table below indicates the comparisons between blitz years.



**Figure 1. Blitz participant numbers and grid cells covered.**

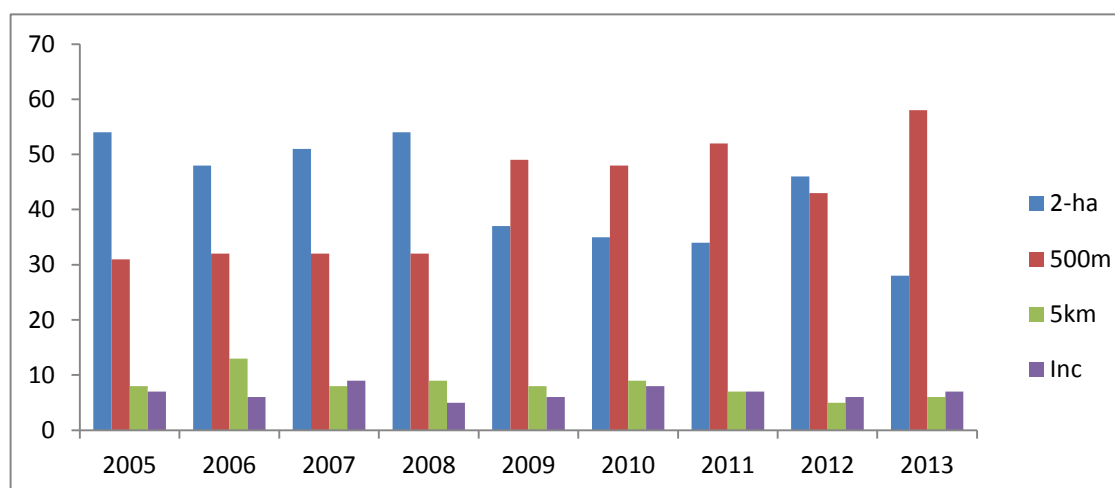
### *Datasheets submitted*

In the 2013 blitz, a total of 359 eligible datasheets were received, 263 in hard copy and 96 electronically. Datasheet numbers have fluctuated over the nine years of the blitz from a previous high of 338 in 2008 to a low of 242 in 2006. The actual number each year appears to have more to do with the types of surveys undertaken, and the relative proportion of lengthy surveys. It is at times a difficult trade-off for our blitzers between covering many grid cells and hence generally adopting the ‘20-minute, two-hectare’ survey, and covering fewer areas but doing so more intensively over a longer period with a ‘within 500m’ survey.

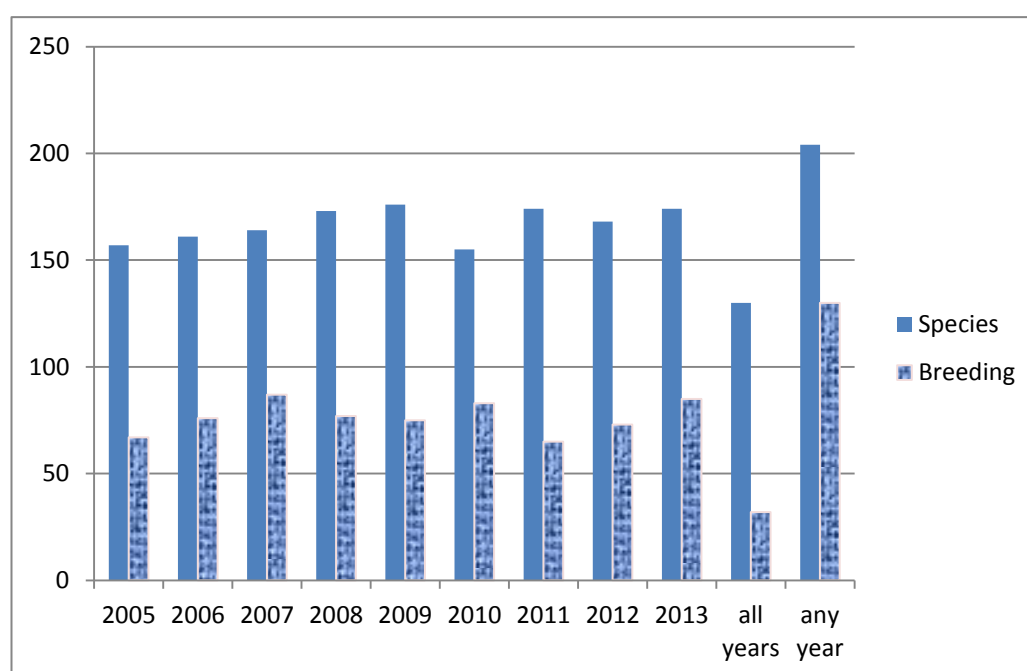
### *Type of survey*

As usual, participants were given the option of choosing their survey type to best fit the grid cell or location they were surveying and to allow for personal preference and time or other constraints. In the 2013 blitz, the ‘within 500 m’ survey proved the most popular, with 58%

of datasheets being for this type of survey. This is unsurprising as the instruction provided in the training courses for newcomers was to use this form of survey. Some 28% of surveys were '2ha, 20-min'; 6% were 'within 5km'; and a further 7% were incidental records. Without closer analysis, it is impossible to be definitive about the effects of survey type on outcomes. In the case of the blitz, which is essentially a citizen science exercise, it is more likely that the time spent at each site has a greater bearing on the numbers of species recorded, or the breeding status.



**Figure 2. Survey type (percentages).**



**Figure 3. Number of species recorded, and recorded breeding.**

#### *Species recorded*

As Figure 3 and Table 2 show, 174 bird species were recorded over the two blitz days in 2013. When all nine blitz years are considered together, 204 species have been recorded, while 130 species have been recorded every year. By way of comparison, the species total for

all of the financial year 2012-13 and the whole of COG's area of concern, as recorded in the annual bird report, was 241 from 224 grid cells (COG 2014). There have been blitz breeding records every year for only 32 species; while 130 species have been recorded as breeding at least once in the blitz.

### *Highlights of the 2013 blitz*

A Pectoral Sandpiper (see Photo below) at the Fyshwick Sewage Ponds was a pleasant surprise, and a first for the blitz. Although the ponds are currently closed, the observer obtained special permission to enter the site and was amply rewarded. These waders are seen more commonly in the interior than at the coast but are seriously "unusual" in the COG area of interest. Another pleasant surprise was only the second blitz recording of a Spotted Harrier. Several expected species which were missed in 2012 put in an appearance in 2013, including the Rufous Fantail, Rose Robin, Stubble Quail and Red-browed Treecreeper.



**Pectoral Sandpiper (*Geoffrey Dabb*)**

### *Species most commonly recorded*

The Australian Magpie (with 237 records, involving 1151 individuals) was restored to its usual preeminent position as 'most common' species. It was followed by the Crimson Rosella (205 records), Pied Currawong (204), Grey Fantail (200), Red Wattlebird (198), Australian Raven (193), Superb Fairy-wren (193), Sulphur-crested Cockatoo (192), Galah (175) and Magpie-lark (172).

No surprises here. The higher number of records for these readily-identifiable species is probably explained by the additional entries from beginning birders.

### *Species recorded only once in blitz 2013*

While it was gratifying to record some species which are often overlooked or which are simply not always present in the ACT, it was sobering to note that there were only single records of 15 species. While even one Cicadabird is welcome (especially when accompanied



by a photograph!) it is worrying to report only single records of Stubble Quail, Peregrine and Brown Falcon, Spotted Quail-thrush and Bassian Thrush.



**Photos and collage: Geoffrey Dabb**

### *Species not recorded in blitz 2013*

Inevitably, species thought to be present in the ACT over the blitz weekend sometimes fail to be recorded. 'Resident' crakes and rails can be missed, as was the case in 2013 with the Spotless Crake and Lewin's Rail. Other species with quite restricted distribution in the ACT, such as the Musk Duck, the Chestnut-rumped Heathwren and the White-fronted Chat, were not recorded in 2013. Several of our occasional visitors did not visit over the blitz weekend, including the Great Crested Grebe and the Channel-billed Cuckoo. There was a notable absence of arid-zone specialists, suggesting that conditions to our west had not deteriorated badly by October 2013. There were a few misses amongst our high-country species, including Wonga Pigeon, Olive Whistler and Powerful Owl. And perhaps more worryingly, for the first time no Southern Whiteface was recorded.

### *Breeding*

As Table 2 and Figure 3 show, in the 2013 blitz 85 species of bird were recorded as 'breeding' – that is a generous interpretation, including the widest parameters recorded such as 'display' and 'inspecting hollow'. The highest breeding we have recorded in the blitz was 87 species in 2007 and the lowest, 65 species in 2011. As usual, the species most commonly recorded as breeding were the relatively large and conspicuous ones, namely (in order of frequency) Australian Magpie, Common Starling, Red Wattlebird, Magpie-lark, Pied

Currawong, White-winged Chough and Noisy Miner. Breeding records were boosted significantly by the contribution of the banding team at New Chums Road who recorded, inter alia, a gravid Shining Bronze-Cuckoo and 12 species with brood patches, including Pilotbird and Bassian Thrush. Interestingly of the eight Tawny Frogmouth records, seven were of breeding.

*ACT-listed vulnerable and endangered species*



**Photos and collage: Geoffrey Dabb**

Of the bird species listed as vulnerable in the ACT, only the Glossy Black-Cockatoo was not recorded during the 2013 blitz and in fact has only been recorded in three previous blitzes, most recently in 2008. As usual, the most widely recorded of the 'vulnerables' was the White-winged Triller, particularly from urban or semi-urban nature reserves, and mostly in low numbers. There were 51 triller records, from 26 distinct grid cells, a sharp rise on the previous two years. The highest number of individuals was 20 at Castle Hill. There were two breeding records: 'on', at Gorooyarroo NR, and 'nb' at Namadgi Visitors Centre woodland. The triller reporting rate of 8.22, while down from a high of 13.04 in 2007, was well above its blitz average of 7.2. The Superb Parrot too appears to be holding its own adequately. There were 18 records of 1-16 birds from 8 grid cells, all in north and north-west Canberra. Its reporting rate of 2.77 was below the 2009 high of 3.68 but still above the blitz average of 2.4. No breeding was recorded, however. The Brown Treecreeper and the Varied Sittella were also recorded in blitz 2013, with 6 records of 1-5 birds from 6 grid cells (in the Tharwa region, the Naas valley and Kama NR) for the former, at a reporting rate of 2.38; and 8 records of 1-4 birds from 5 grid cells (covering Campbell Park, Gorooyarroo, the Namadgi Visitors Centre, Kama NR and Mulligans Flat) at a reporting rate of 2.46 for the latter. Encouragingly the sittella was also recorded as nest building in Mulligans Flat NR. The picture for the Little Eagle was slightly more promising than in 2012, with six records of



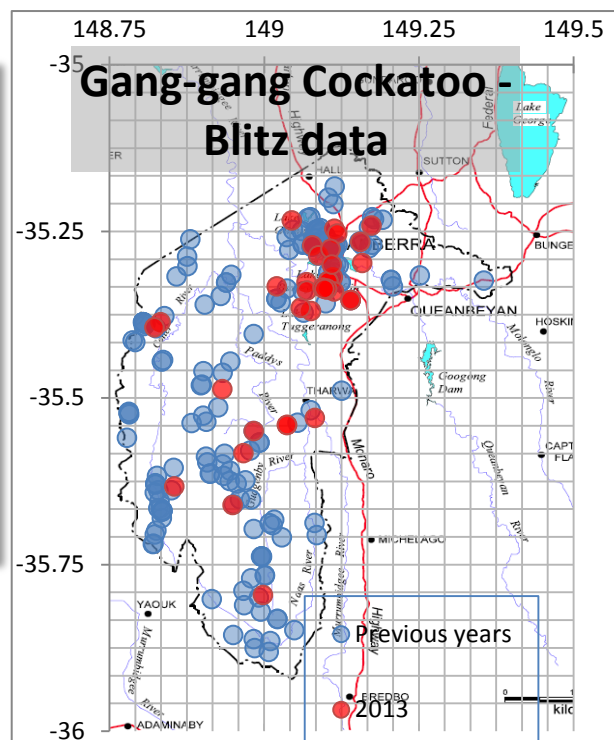
seven individuals, from six grid cells covering Campbell Park, Holt, Tharwa region, Jerrabomberra Wetlands and Mulligans Flat. Its reporting rate of 1.5 was the same as the blitz average, but down from a high of 2.72 in 2010. And, encouragingly, there were two breeding records: 'on' at both Campbell Park and near Holt. The Hooded Robin, however, appears to be in serious trouble, with only one confirmed record again. It was a breeding record though, with dependant young at a known location at Glendale Crossing.

#### *A case study: the Gang-gang Cockatoo*

There were 37 records of the ACT faunal emblem, the Gang-gang Cockatoo, in the 2013 blitz, distributed across 22 grid cells as shown in red, while the blue spots indicate where the species was recorded in previous blitzes. Abundance ranged from one to 12 birds, with the hotspot being Red Hill. The reporting rate for 2013 was 8.53, above the blitz average of 8.2,



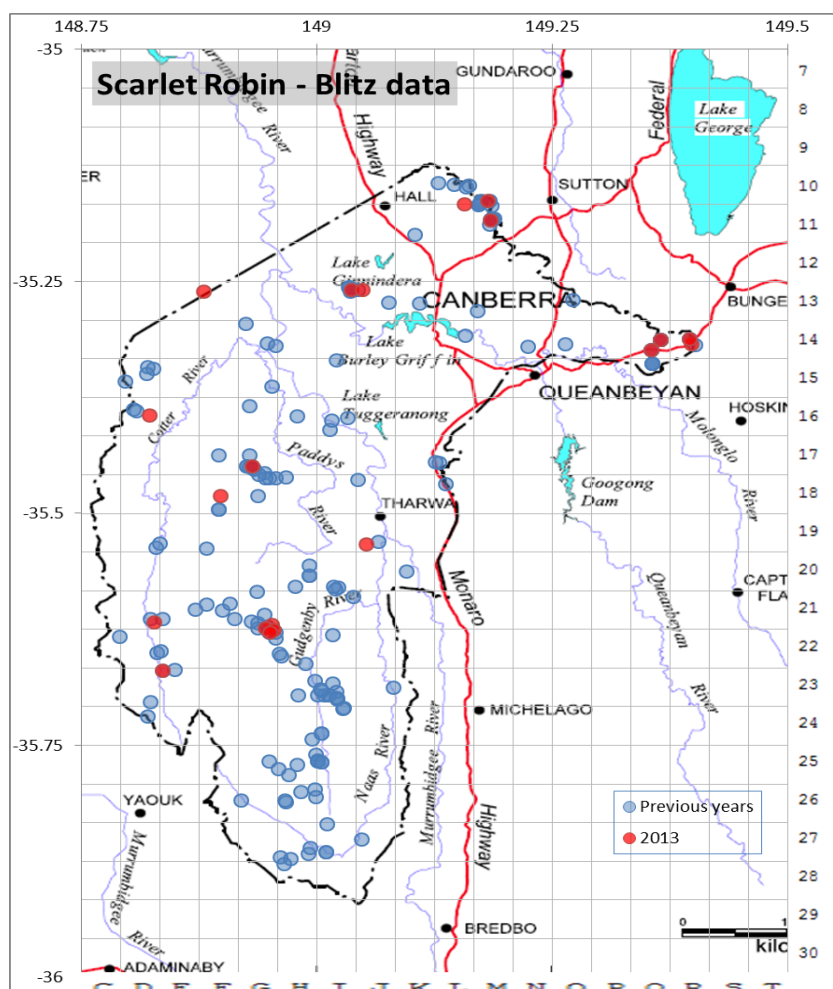
**Gang-gang Cockatoos**  
(*Geoffrey Dabb*)



and has ranged over blitz years from a low of 5.06 in 2010 to 10.66 in 2009.

#### *A case study: the Scarlet Robin*

There were 20 records of the Scarlet Robin in blitz 2013, the average number for the blitz. Numbers ranged from one to five, with a total of 38 individuals. As the distribution map shows, they were widely recorded from 16 grid cells, covering both urban nature reserves and Namadgi National Park. The reporting rate of 7.03 was down slightly on the blitz average of 7.3 but has fluctuated between 8.27 in 2005 and 4.36 in 2007. No clear trend is evident.



## Trends

After nine blitzes, certain trends are becoming evident. While the number of records and recording rate of the majority of species fluctuate, in some cases markedly, trends are emerging for certain species, trends which are for the most part reflected in COG's annual bird reports. Many of the ducks and other waterbirds are doing very well, perhaps thanks to the increasing number of urban wetlands being created. The Crested Pigeon and, regrettably, the Spotted Dove are on the increase. Of the raptors, the Wedge-tailed Eagle is doing well but the falcons, particularly the Peregrine and the Brown, are less common. Amongst the parrots, Little Corella, Rainbow Lorikeet and the Superb Parrot are on the increase and are spreading throughout the ACT. The Eastern Koel is expanding rapidly while the Pallid Cuckoo is declining. Amongst the honeyeaters, both the Red Wattlebird and the Noisy Miner are on the increase. The Australian Magpie, the Pied Currawong and the Magpie-lark are all thriving, but the Superb Lyrebird and the Southern Whiteface are struggling. The picture is varied for the finches, with the Red-browed increasing and the Diamond Firetail decreasing.

## Conclusions and lessons for the future

Blitz 2013, like its predecessors, has increased significantly the amount of data about Canberra's birds. Several of the grid cells surveyed would in all probability not have been covered but for the targeted effort of the blitz. The blitz data are made available to the managers of Canberra's national park and nature reserves. A lesson to be drawn from the

blitz is that, when prompted, more of our members will get out, survey and submit datasheets and perhaps revisit favoured spots.

There is, inevitably, an element of 'luck of the day' in terms of the results but the long-term trends are already being highlighted. The blitz breeding observations are particularly useful in fleshing out a more detailed overall picture of bird breeding in Canberra. And given the tendency of our vulnerable species to be patchily distributed, the additional blitz information about where they are and in what numbers is highly valuable.

### **Acknowledgements**

First and foremost, thanks must go to all COG members who participated in the 2013 blitz, and particularly to those who put in two full days of birding in remote sites. The assistance of staff at Namadgi National Park in providing advice, and access to areas behind locked gates, is greatly appreciated. Thanks also go to Paul Fennell and Steve Wallace for extracting and manipulating blitz data from the COG databases and to Geoffrey Dabb for his wonderful photographs. And sincere thanks are extended too to all those COG members who donated prizes.

*Accepted 22 May 2014*

**Table 1. Known blitz participants 2013**

<i>Barbara Allan</i>	<i>Karin Fyfe</i>	<i>Tony Moleta</i>
<i>Brett Allen</i>	<i>Malcolm Fyfe</i>	<i>Elizabeth Moore</i>
<i>Mark Allen</i>	<i>John Goldie</i>	<i>Cassandra Morrow</i>
<i>Richard Allen</i>	<i>David Gordon</i>	<i>Louise Muir</i>
<i>Geoff Alves</i>	<i>Bill Graham</i>	<i>Terry Munro</i>
<i>Ian Anderson</i>	<i>Jeannie Gray</i>	<i>Trish Munro</i>
<i>Dean Ansell</i>	<i>Anne Hall</i>	<i>Peter Murphy</i>
<i>Frank Antram</i>	<i>Bill Handke</i>	<i>Gail Neumann</i>
<i>Lia Battison</i>	<i>Lindsay Hansch</i>	<i>Desley O'Mara</i>
<i>Sue Beatty</i>	<i>John Harris</i>	<i>Sally Patton</i>
<i>Darryl Beaumont</i>	<i>Stuart Harris</i>	<i>Harvey Perkins</i>
<i>Wendy Beckingham</i>	<i>Judith Harrison</i>	<i>Lucy Randall</i>
<i>Terry Bell</i>	<i>Sandra Henderson</i>	<i>Steve Read</i>
<i>Rosemary Blemings</i>	<i>Jack Holland</i>	<i>Michael Robbins</i>
<i>Jenny Bounds</i>	<i>Ian Hufton</i>	<i>Susan Robertson</i>
<i>John Brannan</i>	<i>Barbara Inglis</i>	<i>Julian Robinson</i>
<i>Tina Bromhead</i>	<i>Marion Jones</i>	<i>Alison Russell French</i>
<i>Muriel Brookfield</i>	<i>Meryl Joyce</i>	<i>Bronwyn Sargesson</i>
<i>John Brown</i>	<i>Jim Kennedy</i>	<i>Marion Sawyer</i>
<i>Keith Bryant</i>	<i>Joanne Kinsella</i>	<i>Ashley Sloan</i>
<i>John Buckley</i>	<i>Sharon Koh</i>	<i>Alastair Smith</i>
<i>Mariko Buszynski</i>	<i>Russell Korsch</i>	<i>Kathryn Smith</i>
<i>Martin Butterfield</i>	<i>Shirley Kral</i>	<i>Nicki Taws</i>
<i>Barbara Cairns</i>	<i>David Landon</i>	<i>Julian Teh</i>
<i>Mark Carey</i>	<i>Gill Langdale-Smith</i>	<i>Meredith Teh</i>
<i>Jean Casburn</i>	<i>Matt Larkin</i>	<i>Alan Thomas</i>
<i>Brian Chauncy</i>	<i>Geoff Larmour</i>	<i>Mieke van den Bergh</i>
<i>Grahame Clark</i>	<i>Kim Farley Larmour</i>	<i>Philip Veerman</i>
<i>Kay Clayton</i>	<i>Sue Lashko</i>	<i>John Waldron</i>
<i>Mark Clayton</i>	<i>Sandra Lauer</i>	<i>Steve Wallace</i>
<i>Alan Cowan</i>	<i>Tony Lawson</i>	<i>Kathy Walter</i>
<i>Julie Crawford</i>	<i>Christine Ledger</i>	<i>Louise Wangerek</i>
<i>Brigitte Curnow</i>	<i>Bruce Lindenmayer</i>	<i>Roger Williams</i>
<i>Roger Curnow</i>	<i>Noel Luff</i>	<i>Tony Willis</i>
<i>Geoffrey Dabb</i>	<i>Rod Mackay</i>	<i>Kevin Windel</i>
<i>Christine Darwood</i>	<i>Alison Mackerras</i>	<i>Lyndall Young</i>
<i>Paul Davies</i>	<i>Sue Mathews</i>	
<i>Barbara de Bruine</i>	<i>Dezma Maxwell</i>	
<i>Dianne Deans</i>	<i>Dougald Maxwell</i>	
<i>Stuart Deans</i>	<i>Duncan McCaskill</i>	
<i>Paul Fennell</i>	<i>Megan Mears</i>	
<i>Matthew Frawley</i>	<i>Peter Mellor</i>	

**Table 2. Species recorded during the 2005 - 2012 blitzes**

[ X=present;\*=breeding]

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011	2012	2013
Emu	<i>Dromaius novaehollandiae</i>	X		X	X			X	X	
Stubble Quail	<i>Coturnix pectoralis</i>		X			X		X		X
Brown Quail	<i>Coturnix ypsilophora</i>		X	X	X	X		X	X	X
Indian Peafowl	<i>Pavo cristatus</i>	X			X		X			X
Magpie Goose	<i>Anseranas semipalmata</i>				X	X				
Musk Duck	<i>Biziura lobata</i>	X	X*		X*	X*		X	X	
Freckled Duck	<i>Stictonetta naevosa</i>								X	X
Black Swan	<i>Cygnus atratus</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Australian Wood Duck	<i>Chenonetta jubata</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Pink-eared Duck	<i>Malacorhynchus membranaceus</i>		X	X		X			X	X
Australasian Shoveler	<i>Anas rhynchos</i>	X	X*	X	X*	X	X*	X*	X	X*
Grey Teal	<i>Anas gracilis</i>	X*	X	X*	X*	X	X*	X	X*	X
Chestnut Teal	<i>Anas castanea</i>	X	X	X*	X	X	X	X	X	X
Pacific Black Duck	<i>Anas superciliosa</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Hardhead	<i>Aythya australis</i>	X	X	X*	X	X	X	X	X	X
Blue-billed Duck	<i>Oxyura australis</i>	X	X		X	X		X		
Australasian Grebe	<i>Tachybaptus novaehollandiae</i>	X*	X	X*	X*	X	X*	X*	X*	X*
Hoary-headed Grebe	<i>Poliocephalus poliocephalus</i>	X	X	X	X	X	X	X	X	X
Great Crested Grebe	<i>Podiceps cristatus</i>	X								



Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011	2012	2013
Rock Dove	<i>Columba livia</i>	X	X	X	X	X	X	X	X	X*
Spotted Dove	<i>Streptopelia chinensis</i>				X	X	X	X	X*	X*
Common Bronzewing	<i>Phaps chalcoptera</i>	X	X	X	X*	X	X*	X	X	X
Brush Bronzewing	<i>Phaps elegans</i>					X				
Crested Pigeon	<i>Ocyphaps lophotes</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Peaceful Dove	<i>Geopelia striata</i>	X	X		X	X		X		X
Wonga Pigeon	<i>Leucosarcia picata</i>	X			X				X	
Tawny Frogmouth	<i>Podargus strigoides</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Australian Owlet-nightjar	<i>Aegotheles cristatus</i>				X			X	X	X
Australasian Darter	<i>Anhinga novaehollandiae</i>	X	X*	X*	X*	X*	X*	X*	X	X
Little Pied Cormorant	<i>Microcarbo melanoleucos</i>	X	X	X*	X*	X*	X*	X*	X	X
Great Cormorant	<i>Phalacrocorax carbo</i>	X	X	X	X	X	X	X	X	X
Little Black Cormorant	<i>Phalacrocorax sulcirostris</i>	X	X	X	X	X	X*	X	X	X
Pied Cormorant	<i>Phalacrocorax varius</i>			X	X	X		X		X
Australian Pelican	<i>Pelecanus conspicillatus</i>	X	X		X	X	X	X	X	X
White-necked Heron	<i>Ardea pacifica</i>		X	X		X		X	X	X
Eastern Great Egret	<i>Ardea modesta</i>		X	X	X	X	X	X	X	X
Intermediate Egret	<i>Ardea intermedia</i>				X		X	X	X	
Cattle Egret	<i>Ardea ibis</i>		X					X	X	X

Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011	2012	2013
White-faced Heron	<i>Egretta novaehollandiae</i>	X*	X*	X*	X	X	X*	X*	X	X
Little Egret	<i>Egretta garzetta</i>				X			X		
Nankeen Night Heron	<i>Nycticorax caledonicus</i>	X	X	X	X	X	X	X	X	X
Glossy Ibis	<i>Plegadis falcinellus</i>		X	X				X		
Australian White Ibis	<i>Threskiornis molucca</i>	X	X	X*	X*	X*	X*	X	X	X
Straw-necked Ibis	<i>Threskiornis spinicollis</i>		X	X	X	X		X		X
Royal Spoonbill	<i>Platalea regia</i>		X	X	X	X	X			X
Black-shouldered Kite	<i>Elanus axillaris</i>	X	X	X	X	X		X	X	X
White-bellied Sea-Eagle	<i>Haliaeetus leucogaster</i>			X	X			X		X
Whistling Kite	<i>Haliastur sphenurus</i>	X	X	X*	X	X		X*	X	X
Brown Goshawk	<i>Accipiter fasciatus</i>	X*	X*	X*	X*	X*	X*	X	X	X
Collared Sparrowhawk	<i>Accipiter cirrhocephalus</i>	X	X	X*	X	X	X	X	X	X
Spotted Harrier	<i>Circus assimilis</i>								X	X
Swamp Harrier	<i>Circus approximans</i>	X	X	X	X		X	X	X	X*
Wedge-tailed Eagle	<i>Aquila audax</i>	X	X	X	X	X*	X*	X	X*	X
Little Eagle	<i>Hieraaetus morphnoides</i>	X	X	X	X*	X*	X*	X	X	X*
Nankeen Kestrel	<i>Falco cenchroides</i>	X*	X*	X*	X*	X	X	X*	X*	X*
Brown Falcon	<i>Falco berigora</i>	X	X	X*	X	X	X	X	X*	X

Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011	2012	2013
Australian Hobby	<i>Falco longipennis</i>	X	X	X*	X*	X*	X*	X	X	X*
Peregrine Falcon	<i>Falco peregrinus</i>	X	X	X	X	X	X*	X*	X	X
Purple Swamphen	<i>Porphyrio porphyrio</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Buff-banded Rail	<i>Gallirallus philippensis</i>		X		X	X				X
Lewin's Rail	<i>Rallua pectoralis</i>								X	
Baillon's Crake	<i>Porzana pusilla</i>				X	X		X		X
Australian Spotted Crake	<i>Porzana fluminea</i>			X		X	X	X		X
Spotless Crake	<i>Porzana tabuensis</i>								X	
Black-tailed Native-hen	<i>Gallinula ventralis</i>					X		X	X	
Dusky Moorhen	<i>Gallinula tenebrosa</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Eurasian Coot	<i>Fulica atra</i>	X*	X	X*	X*	X*	X*	X*	X	X
Black-winged Stilt	<i>Himantopus himantopus</i>			X		X				X
Black-fronted Dotterel	<i>Elseyornis melanops</i>	X	X	X	X	X	X*	X	X*	X*
Red-kneed Dotterel	<i>Erythrogonys cinctus</i>		X	X	X	X				X*
Banded Lapwing	<i>Vanellus tricolor</i>					X				
Masked Lapwing	<i>Vanellus miles</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Australian Painted Snipe	<i>Rostratula benghalensis</i>							X	X	
Latham's Snipe	<i>Gallinago hardwickii</i>	X	X	X	X	X	X	X	X	X
Pectoral Sandpiper	<i>Calidris melanotos</i>									X

Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bar-tailed Godwit	<i>Limosa lapponica</i>			X						
Sharp-tailed Sandpiper	<i>Calidris acuminata</i>	X		X		X		X		X
Painted Button-quail	<i>Turnix varius</i>	X			X	X	X	X	X	
Whiskered Tern	<i>Chlidonias hybrida</i>				X	X				
Silver Gull	<i>Chroicocephalus novaehollandiae</i>	X*	X*	X*	X	X	X	X	X	X
Glossy Black-Cockatoo	<i>Calyptorhynchus lathami</i>	X	X		X					
Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>	X	X	X	X*	X	X	X	X	X*
Gang-gang Cockatoo	<i>Callocephalon fimbriatum</i>	X	X	X	X	X*	X	X*	X	X
Major Mitchell's Cockatoo	<i>Cacatua leadbeateri</i>			X						
Galah	<i>Eolophus roseicapillus</i>	X*	X*	X*	X*	X*	X*	X	X*	X*
Long-billed Corella	<i>Cacatua tenuirostris</i>				X		X	X		X
Little Corella	<i>Cacatua sanguinea</i>	X*	X*	X*	X*	X	X	X	X*	X*
Sulphur-crested Cockatoo	<i>Cacatua galerita</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Cockatiel	<i>Nymphicus hollandicus</i>					X				
Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	X	X	X	X*	X	X	X	X	X
Australian King-Parrot	<i>Alisterus scapularis</i>	X	X	X	X*	X	X*	X*	X*	X*
Superb Parrot	<i>Polytelis swainsonii</i>	X	X*	X*	X	X*	X*	X	X	X

Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011	2012	2013
Crimson Rosella	<i>Platycercus elegans</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Eastern Rosella	<i>Platycercus eximius</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Red-rumped Parrot	<i>Psephotus haematonotus</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Turquoise Parrot	<i>Neophema pulchella</i>					X				
Eastern Koel	<i>Eudynamys orientalis</i>			X	X		X*		X	X
Channel-billed Cuckoo	<i>Scythrops novaehollandiae</i>						X			
Horsfield's Bronze-Cuckoo	<i>Chalcites basalis</i>	X	X*	X	X	X*	X	X	X	X
Shining Bronze-Cuckoo	<i>Chalcites lucidus</i>	X*	X*	X	X	X	X	X	X	X*
Pallid Cuckoo	<i>Cacomantis pallidus</i>	X	X	X	X	X	X	X	X*	X
Fan-tailed Cuckoo	<i>Cacomantis flabelliformis</i>	X	X	X*	X	X	X	X	X	X
Brush Cuckoo	<i>Cacomantis variolosus</i>	X	X	X	X	X	X	X	X	X
Powerful Owl	<i>Ninox strenua</i>					X				
Southern Boobook	<i>Ninox novaeseelandiae</i>	X			X		X		X	X
Eastern Barn Owl	<i>Tyto javanica</i>							X		
Laughing Kookaburra	<i>Dacelo novaeguineae</i>	X*	X*	X	X	X*	X	X	X	X*
Red-backed Kingfisher	<i>Todiramphus pyrrhopygius</i>			X	X					
Sacred Kingfisher	<i>Todiramphus sanctus</i>	X*	X*	X*	X	X*	X*	X	X*	X*
Rainbow Bee-eater	<i>Merops ornatus</i>	X	X	X*	X*	X	X*	X*	X	X*



Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011	2012	2013
Dollarbird	<i>Eurystomus orientalis</i>	X	X	X*	X	X*	X*	X	X*	X
Superb Lyrebird	<i>Menura novaehollandiae</i>	X	X	X	X	X	X	X	X	X
White-throated Treecreeper	<i>Cormobates leucophaea</i>	X	X*	X*	X*	X*	X*	X*	X*	X*
Red-browed Treecreeper	<i>Climacteris erythrops</i>	X	X	X		X	X			X
Brown Treecreeper	<i>Climacteris picumnus</i>	X	X	X*	X*	X*	X	X	X*	X
Satin Bowerbird	<i>Ptilonorhynchus violaceus</i>	X	X	X	X*	X*	X	X	X	X*
Superb Fairy-wren	<i>Malurus cyaneus</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Pilotbird	<i>Pycnoptilus floccosus</i>	X				X	X	X		X*
White-browed Scrubwren	<i>Sericornis frontalis</i>	X*	X*	X*	X*	X*	X	X*	X	X*
Chestnut-rumped Heathwren	<i>Hylacola pyrrhopygia</i>						X		X	
Speckled Warbler	<i>Chthonicola sagittata</i>	X*	X	X*	X*	X*	X*	X*	X	X
Weebill	<i>Smicromis brevirostris</i>	X*	X	X*	X*	X	X*	X*	X	X*
Brown Gerygone										X
Western Gerygone	<i>Gerygone fusca</i>	X	X	X	X	X	X	X	X	X
White-throated Gerygone	<i>Gerygone albogularis</i>	X*	X	X*	X	X	X*	X	X*	X*
Striated Thornbill	<i>Acanthiza lineata</i>	X*	X*	X*	X	X*	X*	X*	X*	X*
Yellow Thornbill	<i>Acanthiza nana</i>	X	X	X	X	X*	X*	X	X	X

Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011	2012	2013
Yellow-rumped Thornbill	<i>Acanthiza chrysorrhoa</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Buff-rumped Thornbill	<i>Acanthiza reguloides</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Brown Thornbill	<i>Acanthiza pusilla</i>	X	X*	X*	X	X*	X*	X*	X*	X*
Southern Whiteface	<i>Aphelocephala leucopsis</i>	X	X*	X	X	X	X	X	X	
Spotted Pardalote	<i>Pardalotus punctatus</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Striated Pardalote	<i>Pardalotus striatus</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	X*	X*	X	X	X	X	X	X	X*
Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>	X	X*	X	X*	X*	X	X	X	X*
White-eared Honeyeater	<i>Lichenostomus leucotis</i>	X*	X	X*	X*	X*	X	X	X	X*
Yellow-tufted Honeyeater	<i>Lichenostomus melanops</i>	X						X		X
Fuscous Honeyeater	<i>Lichenostomus fuscus</i>	X*	X	X*	X*	X	X*	X	X*	X
White-plumed Honeyeater	<i>Lichenostomus penicillatus</i>	X*	X*	X*	X*	X*	X*	X	X*	X*
Noisy Miner	<i>Manorina melanocephala</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Red Wattlebird	<i>Anthochaera carunculata</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
White-fronted Chat	<i>Epthianura albifrons</i>					X	X	X	X	
Crescent Honeyeater	<i>Phylidonyris pyrrhopterus</i>				X	X	X	X		X*
New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>	X	X*	X*	X	X	X	X	X	X
Brown-headed Honeyeater	<i>Melithreptus brevirostris</i>	X	X	X	X*	X	X	X*	X*	X

Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011	2012	2013
White-naped Honeyeater	<i>Melithreptus lunatus</i>	X	X	X	X*	X*	X	X	X*	X*
Noisy Friarbird	<i>Philemon corniculatus</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Spotted Quail-thrush	<i>Cinclosoma punctatum</i>	X	X	X	X	X	X	X	X	X
Eastern Whipbird	<i>Psophodes olivaceus</i>		X	X	X	X	X	X	X	X
Varied Sittella	<i>Daphoenositta chrysoptera</i>	X*	X*	X*	X	X*	X*	X	X*	X*
Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	X	X*	X*	X*	X*	X*	X*	X*	X*
Cicadabird	<i>Coracina tenuirostris</i>				X	X	X		X	X
White-winged Triller	<i>Lalage sueurii</i>	X*	X*	X*	X	X	X	X	X*	X*
Crested Shrike-tit	<i>Falcunculus frontatus</i>	X	X*	X	X	X	X	X	X	X
Olive Whistler	<i>Pachycephala olivacea</i>							X		
Golden Whistler	<i>Pachycephala pectoralis</i>	X	X	X	X	X	X	X	X	X*
Rufous Whistler	<i>Pachycephala rufiventris</i>	X*	X*	X*	X*	X	X*	X	X	X*
Grey Shrike-thrush	<i>Colluricincla harmonica</i>	X	X*	X*	X*	X	X*	X	X	X
Olive-backed Oriole	<i>Oriolus sagittatus</i>	X	X	X*	X*	X	X*	X	X	X*
Masked Woodswallow	<i>Artamus personatus</i>		X	X	X	X		X	X	X
White-browed Woodswallow	<i>Artamus superciliosus</i>		X*	X*	X	X		X	X	X
Dusky Woodswallow	<i>Artamus cyanopterus</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Grey Butcherbird	<i>Cracticus torquatus</i>	X*	X*	X	X	X*	X*	X*	X*	X*

Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011	2012	2013
Australian Magpie	<i>Cracticus tibicen</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Pied Currawong	<i>Strepera graculina</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Grey Currawong	<i>Strepera versicolor</i>	X	X	X*	X*	X*	X*	X	X*	X*
Rufous Fantail	<i>Rhipidura rufifrons</i>	X		X	X	X	X	X		X
Grey Fantail	<i>Rhipidura albiscapa</i>	X*	X*	X	X*	X*	X*	X*	X*	X*
Willie Wagtail	<i>Rhipidura leucophrys</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Australian Raven	<i>Corvus coronoides</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Little Raven	<i>Corvus mellori</i>	X*	X	X*	X*	X*	X*	X*	X*	X
Leadon Flycatcher	<i>Myiagra rubecula</i>	X*	X*	X*	X*	X	X*	X*	X*	X*
Satin Flycatcher	<i>Myiagra cyanoleuca</i>	X	X	X	X	X	X	X	X	X
Restless Flycatcher	<i>Myiagra inquieta</i>	X	X	X		X		X	X	X
Magpie-lark	<i>Grallina cyanoleuca</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
White-winged Chough	<i>Corcorax melanorhamphos</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Jacky Winter	<i>Microeca fascians</i>	X	X*	X	X	X	X	X	X	X
Scarlet Robin	<i>Petroica boodang</i>	X*	X*	X	X*	X*	X	X*	X	X*
Red-capped Robin	<i>Petroica goodenovii</i>	X	X*	X*	X	X	X*	X	X	X
Flame Robin	<i>Petroica phoenicea</i>	X	X*	X*	X*	X*	X*	X*	X*	X*
Rose Robin	<i>Petroica rosea</i>	X	X	X	X	X	X	X		X
Hooded Robin	<i>Melanodryas cucullata</i>	X*	X*	X*	X	X*	X	X*	X	X*

Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011	2012	2013
Eastern Yellow Robin	<i>Eopsaltria australis</i>	X*	X*		X	X	X	X	X*	X*
Eurasian Skylark	<i>Alauda arvensis</i>	X	X	X	X*	X	X	X	X*	X
Golden-headed Cisticola	<i>Cisticola exilis</i>	X	X	X	X	X	X*	X	X*	X
Australian Reed-Warbler	<i>Acrocephalus australis</i>	X*	X	X	X	X*	X*	X*	X*	X*
Little Grassbird	<i>Megalurus gramineus</i>	X	X	X	X	X*	X	X	X	X
Rufous Songlark	<i>Cincloramphus mathewsi</i>	X	X	X	X	X	X	X*	X*	X
Brown Songlark	<i>Cincloramphus cruralis</i>	X*	X	X*	X	X		X	X	
Silvereye	<i>Zosterops lateralis</i>	X	X	X*	X	X	X*	X	X*	X*
Welcome Swallow	<i>Hirundo neoxena</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Fairy Martin	<i>Petrochelidon ariel</i>	X	X	X*	X*	X*	X*	X*	X*	X*
Tree Martin	<i>Petrochelidon nigricans</i>	X*	X*	X*	X*	X*	X*	X	X*	X*
Bassian Thrush	<i>Zoothera lunulata</i>	X	X		X	X			X	X*
Common Blackbird	<i>Turdus merula</i>	X*	X	X*	X	X	X	X*	X*	X*
Common Starling	<i>Sturnus vulgaris</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Common Myna	<i>Sternus tristis</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Mistletoebird	<i>Dicaeum hirundinaceum</i>	X*	X	X	X	X*	X*	X	X*	X
Double-barred Finch	<i>Taeniopygia bichenovii</i>	X	X*	X*	X*	X	X	X*	X	X
Red-browed Finch	<i>Neochmia temporalis</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*



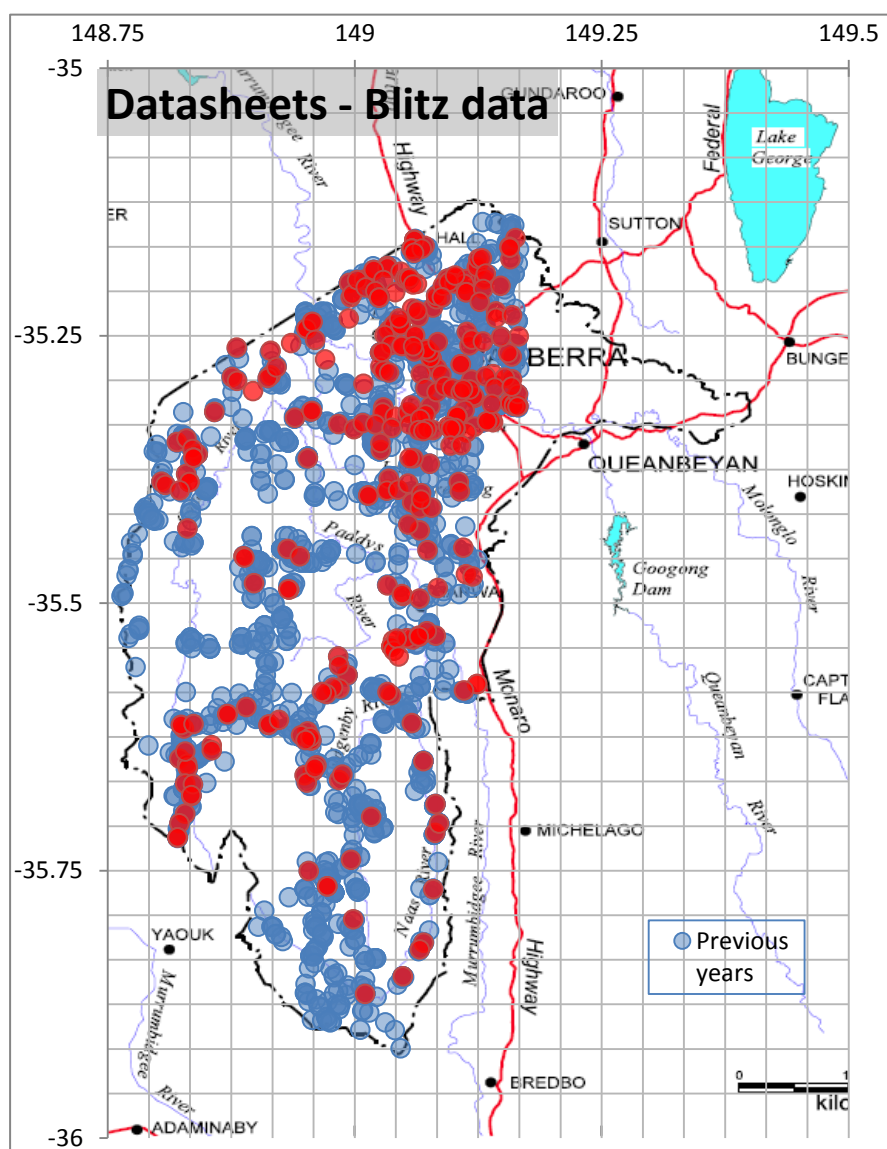
Table 2 continued

Common name	Scientific name	2005	2006	2007	2008	2009	2010	2011	2012	2013
Diamond Firetail	<i>Stagonopleura guttata</i>	X	X	X	X	X	X	X	X	X
House Sparrow	<i>Passer domesticus</i>	X*	X*	X*	X*	X*	X*	X*	X*	X*
Australasian Pipit	<i>Anthus novaeseelandiae</i>	X	X	X*	X*	X*	X*	X*	X	X*
European Goldfinch	<i>Carduelis carduelis</i>	X	X*	X	X	X	X	X	X	X
Common Greenfinch	<i>Chloris chloris</i>	X				X	X	X	X	X*
Mallards, Black Duck-Mallard hybrids and variants		X	X	X	X	X	X	X	X	X

## Notes

Domestic ducks and geese, which frequent the lakes, have been excluded, as have domestic chickens even when recorded far from civilisation. The peafowl have been included as they appear to be a naturally reproducing “wild” population, in suburbia. The “mallard” group has been lumped as their exact identity cannot be assured – it probably includes crosses with domestic birds. The Emu and Magpie Geese are – or were - probably part of the semi-captive population at Tidbinbilla Nature Reserve.

**Map 1. Blitz coverage 2005-2012 (blue/light grey) and 2013 (red/dark grey)**



## CHANGE FOR THE BETTER: FOURTEEN YEARS ON PERCIVAL HILL

JOHN HARRIS

*36 Kangaroo Close, Nicholls, ACT 2913*

The variety of habitats on and around Percival Hill make it a varied, productive but very accessible birdwatching site. Percival Hill rises steeply to 662m from Ginninderra Creek at the junction of Gundaroo Drive and the Barton Highway. Once part of one of the farming leases which long ago made up the old Gungahlin district, it is now a Nature Reserve, covering 63 ha. A key feature of Percival Hill which greatly enhances its birdwatching potential is that Ginninderra Creek runs along its steep eastern edge, which is probably the reason why it was part of the farming lease which included the Ginninderra Creek flood plain in the first place. The Creek is not technically part of the Nature Reserve but the birds do not know that!

Recent years have seen considerable urban development around Percival Hill, these northern suburbs collectively retaining the historic name of Gungahlin. The centrepiece of this urban complex was the damming of Ginninderra Creek at the north-east end of Percival Hill, creating the substantial pond and wetland complexes of Gungahlin Pond and Yerrabi Pond.

In the year 2000 I moved into a new home backing onto Ginninderra Creek a few hundred metres beyond the dam wall and directly opposite Percival Hill. It was immediately obvious to an old birdwatcher like me that I had stumbled across an interesting and accessible birdwatching environment. As a very recent COG member, it was good to find that my Garden Bird Survey site reached across the creek to the bottom of the hill, so that it includes the little floodplain with its native grasses and then a stretch of the creek itself. Technically, my GBS site does not extend further onto Percival Hill (on which I therefore report separately) but almost all the birds seen on Percival Hill at some point also cross the creek to the trees on the eastern side behind my back fence. So there are really three environments here, the hill, the creek and the floodplain. I will treat them separately.

### **Percival Hill**

The hill was once covered by a red stringybark and scribbly gum forest. Small pockets of remnant forest remain mainly on the north-western edge. Most of the hill was cleared as part of a farm. These farms were compulsorily acquired by the Commonwealth Government in 1915 following the 1911 Act establishing the Capital Territory. The farms were leased back to tenants but were finally resumed in 1991 for the construction of Gungahlin. While forest birds had remained in small numbers in the remnant forest, and some bred there (most obviously the Sulphur-crested Cockatoo and Galah) there was little birdlife on the bare slopes except for the usual Magpies, Magpie-larks, Ravens and other ubiquitous birds. The only 'good' birds regularly seen on the treeless hill itself were Red-rumped Parrots and Pipits but lower down the slopes, the native grasses just above the creek were well populated with Red-browed Finches, Double-barred Finches, Superb Fairy Wrens, Golden-headed Cisticolas, Little Grassbirds and the occasional Quail.

Landcare volunteers, however, did a fantastic job in the late 1990s, replanting the eastern slopes of the hill. The stands of eucalypts are now becoming quite mature and the forest birds

have returned. Crimson and Eastern Rosellas are of very common. All of the Thornbills returned and Percival Hill's mixed feeding flock of small birds has increased hugely in both size and variety. The 2013 Autumn MFF was consistently over 50 birds, including the Yellow-rumped, Striated, Buff-rumped and Brown Thornbills, Red-browed Finches, Weebills, Silveryeyes and Western and White-throated Gerygones. Trees brought both the White-throated and Brown Treecreepers. The Eastern Yellow Robin is now common as is Jacky Winter. Less common but now seen in most years are the Scarlet, Flame, Red-capped and Hooded Robins.

In the past few years the trees have matured sufficiently to flower and this has brought the honeyeaters (although it is relevant that the past few years have also seen the maturing of the nearby suburban gardens like mine). Red Wattlebirds and Noisy Miners were naturally the first but they were rapidly followed by Eastern Spinebills and then the Yellow-faced, White-eared, White-plumed, White-naped and New Holland Honeyeaters. Koels, rare here before, have become increasingly common, partly because of the suburban fruit trees but also because they now have access to nesting Red Wattlebirds in the developing forest. Flowering trees also brought Rainbow Lorikeets and, in recent years, Superb Parrots, although they have always nested just a few kilometres North in Mulligan's Flat. Yellow-tailed Black Cockatoos were quite uncommon until the 2003 bushfires in the south of Canberra. For about a week in late January 2003, what seemed like all the Black Cockatoos in the ACT were in Gungahlin. They seem to have 'discovered' Percival Hill as a result, and now they are frequent visitors, sometimes in flocks of as many as 40, mostly in late winter and early spring.

The bushfires prompted some welcome improvements to the Percival Hill Nature Reserve because of the precautions being taken after the lessons of the 2003 fires. Access roads were constructed which make walking around the site relatively easy except in the steepest parts. Furthermore, a low-level crossing was constructed over Ginninderra Creek to allow emergency vehicle access to the Reserve. While this is locked to the general motoring public, it makes an easy foot crossing over the creek adjacent to where I live and also for anyone who accesses the Reserve by mounting the gutter just after the Crace roundabout and following the track down to park just before the crossing.

A very positive impact on bird life, however, has been the construction of two dams to store water for firefighting, a small upper dam to divert the runoff and a lower, much larger storage dam. The small upper dam is still more or less in open grassland but the larger lower dam has gradually become surrounded by the expanding forest which is now self-seeding from the plantings of the 1990s. Thus it is, for Canberra at least, an unusual environment to have a small but permanent body of water within a forest and becoming increasingly hidden by thickets of trees and shrubbery. Curiously, there were more water birds when the dam was first constructed than there are now. Ducks, Moorhens, Swamphens and the white-faced Heron were once regular visitors but now less frequent. I suspect that the water is becoming less visible from the air and is now competing with the many newly constructed wetlands in Gungahlin. As the dam became populated with frogs and other water life, the secluded water has annually brought the Sacred Kingfisher and, in 2008, 2011 and 2013, the Azure Kingfisher. In every year since 2007, Rainbow Bee-eaters have visited the dam, feeding mostly on dragonflies.

The dam and the maturing forest mean that there is now an abundance of forest birds, especially obvious in the breeding season. In the past four years, birds breeding on Percival Hill have included: Noisy Friarbird, Shining-Bronze Cuckoo, Grey Fantail, Eastern Rosella,

Crimson Rosella, Red-Rumped parrot, King Parrot, Koel, Galah, Sulphur-crested Cockatoo, Magpie, Magpie-lark, Pied Currawong, Golden and Rufous Whistler, Grey Shrike-thrush, Black-faced Cuckoo-shrike, Willie Wagtail, Spotted and Striated Pardalote and, regrettably, Mynas, Starlings and Blackbirds.

Increased bird life, especially breeding birds, has brought a noticeable increase in raptors which previously circled high over Percival Hill in the air currents, only venturing lower to investigate the more productive creek banks just beyond the hill. The commonest small raptor now is the Black-shouldered Kite but also quite common are the Brown Goshawk, Nankeen Kestrel, Brown Falcon and Australian Hobby, especially in the breeding season. Less common are the Peregrine Falcon, Spotted Harrier and the Collared Sparrowhawk which I have seen only in some years but that may just be the luck of the observer. There is a dead tree on the skyline of Percival Hill which is a favourite roosting place for smaller raptors. They commonly roost there when birds are nesting in the forest and are regularly seen being harried by smaller birds. Of the larger raptors, the Wedge-tailed Eagle is fairly common, circling high on the currents but sometimes hunting. Twice a Wedge-tailed Eagle has taken one of my neighbour's hens and the same eagle has taken to roosting on the hen-house roof until disturbed. Little Eagles are also seen fairly regularly and have been observed to take small mammals from the hill.

Some unusual birds visit Percival Hill. As it becomes more forested it is becoming an obvious high landmark and therefore attractive to birds flying from the north-west, that is, across the cleared farmlands between Percival Hill and the Murrumbidgee River. Among the more interesting birds observed have been several parrots rare to Canberra, the Turquoise Parrot (2009, 2011), Blue-winged Parrot (2005, 2007, 2008, 2011, 2013) and Swift Parrot (2006, 2010, 2012). Of course they may have been passing through in other years but I have not personally observed them. (*Note: None of these parrots nor any other bird in this paper defined as 'unusual' by COG have been formally verified and most were observed before I belonged to COG anyway.*)

I am personally bemused by the otherwise common birds in the ACT which I have seen elsewhere never actually observed in 13 years on Percival Hill. These include the White-winged Chough, Speckled Warbler, Tree Martin and Olive-backed Oriole, all of which no doubt proves that even in 14 years a lone observer can miss some birds, even common ones.

An observation which causes some concern to me is that introduced pest species are naturalising on the hill. Whereas I once thought of the Mynas, Sparrows, Starlings and Blackbirds as essentially garden pests, they are rapidly becoming naturalised in the forest. All have bred there in the past few years and they are increasingly behaving like forest birds. It is no longer unusual to see Mynas pursuing and catching insects on the wing like a flycatcher or Blackbirds in the hot weather diving to drink from the dam or creek surface like the Wattlebirds do. Sparrows have joined the autumn mixed-feeding flock.

### **Ginninderra Creek**

Many of the more common waterbirds use Ginninderra creek. Pacific Black Ducks, Australian Wood Ducks, Grey Teals, Swampheens, Moorheens and Eurasian Coots are present every year and all have at some time or other in the past 14 years bred in the reeds in the creek, although they all risk a summer thunderstorm and the rapid rising of the creek which destroyed nests in several breeding seasons. Regular visitors include the more common

larger wading birds: Australian White Ibises, Straw-necked Ibises, Eastern Great Egrets and White-faced Herons. Nankeen Night Herons visited in both 2002 and 2007, Glossy Ibises in 2007, 2008 and 2009 and both Royal and Yellow-billed Spoonbills turn up to forage in the years when the Creek overflows its banks. Cattle Egrets are common in the years when cattle graze the hill for fire fuel reduction. Wading birds now like the shallow access to the creek at the new low-level crossing.

Little Pied Cormorants are observed almost daily. They were once far more common years ago along the creek until the destruction of the willows which, while it may have lessened the danger of willows turning up in the Murrumbidgee Irrigation Area, served to remove the convenient roosting places for diving birds. There is now one solitary dead tree branch poking out of the water which daily has an occupant, mostly a Little Pied Cormorant but sometimes a Little Black Cormorant. Before the willows were removed, kingfishers also liked the creek. I used to walk here regularly before Gungahlin was built. Sacred Kingfishers were relatively common and Azure Kingfishers were also occasionally seen. They no longer find the creek as suitable but Sacred Kingfishers still come to the trees near the creek on occasion. In those years in which the Azure Kingfishers were observed visiting the dam on Percival Hill, they were also seen inspecting the creek but were never actually observed hunting. The few trees are probably too far from the creek to dive from. Twice, one has been seen on a fence post but again, five metres away from the creek.

A far more important feature of Ginninderra Creek below the Gungahlin Pond dam wall is that it is the major flight corridor between Gungahlin (and Yerrabi) Ponds and Lake Ginninderra. Water birds choose to follow the line of the creek and the commoner birds can be seen following it daily – Black Ducks, Wood Ducks, Little Pied and Little Black Cormorants, Great Cormorants, White-faced Herons and White Ibises. At some point in the past 14 years I have observed flights along the creek of almost every other large water bird which one might ever expect to see in Canberra – Black Swans, Cattle Egrets, Royal and Yellow-billed Spoonbills, Straw-necked Ibises and the rarer Glossy Ibis. A flock of over 40 Pelicans flew north along the creek corridor on 12<sup>th</sup> May 2013 and remained in the air above Gungahlin for over an hour. In autumn of most years, the White-bellied Sea Eagle also uses the corridor. One was seen to take a carp in 2011 and in 2013 one was distracted by my neighbour's hens and stayed around for some hours.

### **The floodplain**

North of Gungahlin, Ginninderra Creek runs through relatively rugged terrain but once it reaches Gungahlin it slows sufficiently to produce a small floodplain. Town planners have realised the floodplain was unsuitable for urban development although the CSIRO has plantings south of the Barton Highway and there is a golf course along the creek between the two pond systems. Despite that, near Percival Hill the floodplain still has extensive stretches of tall native grasses which merge with the reeds on the creek edges. A short stretch behind our houses on Kangaroo Close is mowed for fire protection but much tall grass still remains and has expanded where it was once eaten by cattle in the farming days.

Many species of grassland birds inhabit the floodplain grasses. The commonest residents are Superb Fairy Wrens and Red-browed Finches. Flocks of these finches are regularly over 40 birds. Double-barred Finches are there in lesser numbers. The calling of the Reed Warblers from the reeds and the grasses closer to the creek bank is almost constant during the spring and early summer. Cisticolas and Little Grass Birds are also relatively abundant but

unobtrusive, especially outside the breeding season, and therefore less frequently observed. No doubt the same applies to the Brown and Stubble Quail which are observed occasionally near the creek and much more frequently above the creek on the hill which no doubt means that they are inhabitants of the creek grasses but less visible – and that I am the lone observer. Over the past 14 years all of the birds mentioned have been observed to breed in the grasses or reeds.

### **Conclusion**

There is a positive future for birdwatching in the far northern parts of the ACT. An important feature of the north are the sizable reserves between Gungahlin and the NSW border, one of which, Mulligans Flat, owes its existence to the COG and their concerns for the breeding sites of the Superb Parrot. Another important initiative has been the inclusion of extensive constructed wetlands in the town plans which are already very important water-bird breeding sites. The mixed habitats of Percival Hill and the nearby Ginninderra Creek and floodplain will also remain into the future an important site for a variety of birds.



**Ginninderra Creek at the low level crossing and Percival Hill beyond (*John Harris*)**

*Accepted 30 May 2014*



**Table 1. Birds observed on Percival Hill 2000 – 2013.**Note: Species in *italics* and any other species defined as ‘unusual’ by COG have not been formally verified.

Species	00	01	02	03	04	05	06	07	08	09	10	11	12	13
Stubble Quail	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brown Quail	X	X	X	X	X	X	X	X	X	X	X	X	X	X
A Wood Duck							X	X	X	X	X	X	X	X
P Black Duck							X	X	X	X	X	X	X	X
Crest. Pigeon	X	X	X	X	X	X	X	X	X	X	X	X	X	X
LP Cormorant										X		X	X	X
LB Cormorant												X		X
W F Heron										X	X	X	X	X
B-s. Kite	X	X	X	X	X	X	X	X	X	X	X	X	X	X
B Goshawk		X		X		X	X	X	X	X	X	X	X	X
C Sparrowh.		X				X		X		X	X		X	X
Spot. Harrier							X	X	X		X	X	X	X
W-t. Eagle	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Little Eagle	X	X	X	X	X	X	X	X	X	X	X	X	X	X
N Kestrel		X		X	X		X	X		X	X	X	X	X
Brown Falcon						X		X		X	X	X	X	X
A Hobby									x		x		x	
Per. Falcon	X	X	X	X	X	X	X	X	X	X	X	X	X	X
P Swamphen							X	X	X	X		X		
D Moorhen							X	X	X	X	X	X	X	
E Coot										X	X	X	X	X
M Lapwing	X	X	X	X	X	X	X	X	X	X	X	X	X	X
YTB Cockatoo				X	X	X	X	X	X	X	X	X	X	X
Galah	X	X	X	X	X	X	X	X	X	X	X	X	X	X
S-c. Cockatoo	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R Lorikeet										X	X	X	X	X
A King Parrot											X		X	X
Superb Parrot												X	X	X
Cr. Rosella	X	X	X	X	X	X	X	X	X	X	X	X	X	X
E Rosella	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Swift Parrot							X				X		X	
Red-r. Parrot		X		X	X	X		X	X	X	X	X	X	X
<i>Turq. Parrot</i>										X		X		
<i>Bl-w. Parrot</i>						X		X	X			X		X
Eastern Koel									X	X	X	X	X	X
Shi. B Cuckoo										X	X	X	X	X
S Kingfisher								X	X	X	X	X	X	X
<i>Azure Kingf.</i>										X		X		X
R Bee-eater								X	X	X	X	X	X	X
W Treecreeper										X	X	X	X	X
B Treecreeper										X		X	X	X
S Fairy-wren	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WB Scrubwren									X		X	X	X	X
Weebill								X	X	X	X	X	X	X
W-t. Gerygone							X	X	X	X	X	X	X	X
Wst. Gerygone								X		X	X	X	X	X
Stri. Thornbill								X	X		X	X	X	X
Yel. Thornbill									X			X	X	X
Y-r. Thornbill		X		X	X	X	X	X	X	X	X	X	X	X
Buff-r. Thornb.						X		X	X	X	X	X	X	X
Br. Thornbill						X	X	X	X	X	X	X	X	X
Spo. Pardalote								X	X	X	X	X	X	X

Table 1 continued

Species	00	01	02	03	04	05	06	07	08	09	10	11	12	13
Str Pardalote								X	X	X	X	X	X	X
E Spinebill						X	X	X	X	X	X	X	X	X
Y-f. Honeyeat.							X	X	X	X	X	X	X	X
W-ear. Honey.							X		X	X	X	X	X	X
W-pl. Honey.						X		X	X	X	X	X	X	X
Noisy Miner				X	X	X	X	X	X	X	X	X	X	X
R Wattlebird			X	X	X	X	X	X	X	X	X	X	X	X
Scarl. Honey.								X			X		X	X
New H Honey.							X		X		X		X	X
W-n.. Honey.								X	X	X		X	X	X
N Friarbird									X		X		X	X
B-f. Cuckoosh.					X	X	X	X	X	X	X	X	X	X
W-w. Triller										X	X	X	X	X
Gol. Whistler										X	X	X	X	X
Ruf. Whistler										X	X	X	X	X
G Shr.-thrush		X		X			X	X	X	X	X	X	X	X
D Woodswal.			X	X	X	X	X	X	X	X	X	X	X	X
Gr. Butcherb.						X	X	X	X	X	X	X	X	X
A Magpie	X	X	X	X	X	X	X	X	X	X	X	X	X	X
P Currawong	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Grey Fantail					X	X	X	X	X	X	X	X	X	X
Willie Wagtail				X	X	X	X	X	X	X	X	X	X	X
A Raven	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L Flycatcher						X	X	X	X	X	X	X	X	X
R Flycatcher							X		X		X	X	X	
Magpie-lark	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Jackie Winter					X	X	X	X	X	X	X	X	X	X
Scarl. Robin					X		X		X	X	X	X	X	X
Red-c. Robin						X	X	X		X	X		X	
Rose Robin									X	X		X		
<i>Hooded Robin</i>									X		X		X	X
E Yell. Robin							X	X	X	X	X	X	X	X
G-h. Cisticola	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L Grassbird	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Silvereye			X	X	X	X	X	X	X	X	X	X	X	X
Wel. Swallow		X			X		X	X	X	X	X	X	X	X
C Blackbird									X	X	X	X	X	X
C Starling												X	X	X
C Myna	X	X	X	X	X	X	X				X		X	X
Mistletoebird										X	X	X		
Dble.-b. Finch	X	X		X		X		X	X	X	X	X	X	X
Red-br. Finch	X	X	X	X	X	X	X	X	X	X	X	X	X	X
H Sparrow	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Aust. Pipit	X	X	X	X	X	X	X	X	X	X	X	X	X	X
E Goldfinch								X	X	X	X	X	X	X

**Table 2. Birds observed using Ginnindera Creek**

Note: For the purpose of this table, “using Ginnindera Creek” means living in the creek and its small flood plain, visiting the Creek or using the Creek as a corridor. It does not include birds flying East or West over the Creek to or from Percival Hill which would simply be most birds in Table 1, all of which from time to time fly across the Creek.

Species	Resident in reeds and grasses of flood plain	Resident in Creek	Occasionally observed using Creek	Flying along Creek corridor, regularly visiting	Flying along Creek corridor, occasionally visiting	Flying along Creek corridor, never seen visiting
Stubble Quail	X					
Brown Quail	X					
Black Swan						X
A Wood Duck		X		X		
Grey Teal					X	
P Black Duck		X		X		
Hardhead					X	
L P Cormorant				X		
G Cormorant						X
L B Cormorant				X		
A Pelican						X
W-n. Heron					X	
E Great Egret					X	
Cattle Egret					X	
W-f. Heron				X		
N Night Heron					X	
Glossy Ibis						X
A White Ibis				X		
Straw-n. Ibis					X	
R Spoonbill					X	
Y-b. Spoonbill					X	
W-b. Sea Eagle					X	
P Swamphen		X				
D Moorhen		X				
E Coot		X				
Mask. Lapwing			X			
Sacr. Kingfisher			X			
<i>Azure Kingfisher</i>			X			
R Bee-eater			X			
S. Fairy-wren	X					
G-h. Cisticola	X					
A Reed-Warbler	X					
L Grassbird	X					
Welc. Swallow			X			
Double-b. Finch	X					
Red-br. Finch	X					
E Goldfinch	X					

## HOW PROLIFIC ARE NOISY MINERS? THE 2010/11 BREEDING SEASON ON THE CAMPUS OF THE AUSTRALIAN NATIONAL UNIVERSITY, CANBERRA

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**Abstract:** *In response to good rainfall in February 2010, Noisy Miners (Manorina melanocephala) nested late in the breeding season at the Australian National University (ANU) in Canberra. Eleven sets of fledglings were found in April 2010. Noisy Miners checked at the same time at several sites in suburban Canberra, gave no indication of late breeding. For the 2010/11 breeding season all broods that produced fledglings were recorded at the ANU. The loud and persistent begging calls of nestlings and fledglings were the main means of locating broods. 95 broods produced a minimum of 144 fledglings (1.52 fledglings/successful brood). The breeding season extended from late July (nest building) to early April (last sets of fledglings). The seasonal distribution of broods, with a notable peak in January, was most likely influenced by rainfall events. Females produced one to two broods, and in a few cases probably three. The minimum number of females at the ANU in 2010/11 was 43. Given the sex ratio of 3-5 males for every female in this species, the minimum adult population of Noisy Miners at the ANU consisted of 172 to 258 birds.*

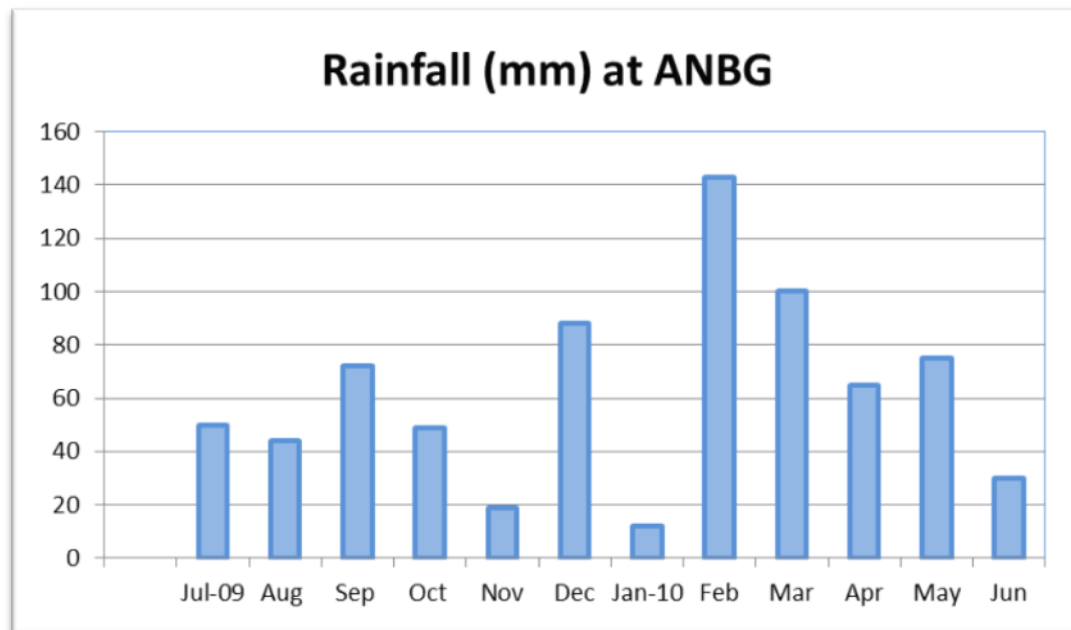
### 1. Introduction

Good rainfalls in Canberra at the end of 2009 after a long period of drought, and ongoing good rain in the first part of 2010 (Fig. 1), triggered late breeding in a number of local waterbird species, but more notably also in a number of woodland birds as shown by the many contributions to the COG chat line and summary reports by J. Holland in COG's Gang-Gang newsletter (April, May 2010). The Noisy Miner (*Manorina melanocephala*), was included in this list of species. Nest building was observed in early March 2010 at Callum Brae, although this breeding event did not go any further (M. Leggoe, COG chat line, 23 March 2010). However, at the campus of the Australian National University (ANU) in Canberra I found several broods in April 2010. This gave the impetus to see whether the Noisy Miner would again have an extended breeding season at the ANU in 2010/11. I could do this by following breeding events from the start to the end of the season. This article gives the details of the late breeding event in 2010 and an assessment of the number and the spread of broods across the 2010/11 breeding season.

### 2. Aspects of the biology of the Noisy Miner relevant to the survey

Noisy Miners live all year round in *colonies* which may number several hundred birds, and breed cooperatively. The basic unit of a colony is a *coterie* which occupies a fairly stable *activity area* outside the breeding season, but when females are nesting, individual males may also move into areas occupied by other coterie (Dow 1979a). The birds in a coterie include both sexes in a ratio of 3-5 males for every female. The activity area of a given male will overlap with those of other males. The activity areas of a given female will overlap with those of males but not with those of other females. Birds from neighbouring coterie will join

together in mobbing predators, or may form temporary *coalitions* (Dow 1979a, b; Higgins et al. 2001).



**Figure 1. Rainfall (mm) pattern July 2009 to Jun 2010 at the Australian National Botanic Gardens (ANBG), close to the ANU campus.**

The female builds the nest and incubates the eggs alone. While at the nest the female is visited by several males (Dow 1979b). The mating system of the species was initially considered to be *cooperative polyandry* (Dow and Whitmore (1990) in P. Pöldmaa et al. 1995). However, detailed observations, supported by molecular paternity studies of the young shown that Noisy Miners are monogamous with up to 20 helpers assisting the breeding pair. Hence the mating system is now described as *genetic monogamy* (Pöldmaa et al. 1995).

Once the young have hatched, males provide food to them until their independence. Each male attends to young from more than one nest across neighbouring coterie. Each set of young is visited by several males, commonly five or more. Females only feed their own offspring.

A notable characteristic of young Noisy Miners is that they are very vocal. They beg very loudly and persistently already while in the nest, and even more intensely once fledged. Since the young are fed by several adults from more than one coterie it is important that the young, especially once fledged, advertise their position to attract as many providers as possible (O'Brien and Dow 1979). The young have to compete for attention from the adults. Feeding rates for young Noisy Miners are the highest recorded for any species of bird (Dow 1978).

At the same time, such loud vocalisations may come at a cost: they may attract predators as Haff and Magrath (2011) have shown in the case of the White-browed Scrub-wren (*Sericornis frontalis*). The aggressiveness of Noisy Miners towards other birds (Dow 1977) and the strategy that many individuals from a coalition can quickly join in mobbing potential predators may reduce the risk of predation for the vocal young Noisy Miners (Arnold 2000a).

### 3. Results and discussion

#### 3.1. Late broods in April 2010

In mid April 2010 I noticed recently fledged Noisy Miners on the ANU campus. Checking further I found a total of 11 sets of fledglings between 13 to 26 April. It takes about 40 days from nest building to the appearance of fledglings (Higgins et al. 2001). The females had responded to the high rainfall (>100 mm) in February (Fig. 1) and started nesting in early March with fledglings appearing by mid-April. The last time a begging young was seen being fed by an adult was on 1 June 2010. This means that the species was able to raise young right through autumn to the start of winter.

The normal breeding season in our region goes from September to December, although it may extend from June to January (Wilson in Frith 1976). The species is multiple brooded; however, there is no detailed information available from the Canberra region about the frequency of broods in a season. Based on the Garden Bird Survey (GBS), fledglings have been recorded in suburban Canberra from late September to January (Veerman 2006) with a peak in January (Canberra Ornithologists Group 2009) and one observation from April (Veerman 2006).

Interestingly, a check of suburban Noisy Miner populations outside the ANU at four sites in Ainslie, along Sullivan's Creek in Dickson and Lyneham and at the Ngunnawal shops in late April 2010 failed to find any indications of late breeding.

#### 3.2. The 2010/11 breeding season

##### 3.2.1. Methods

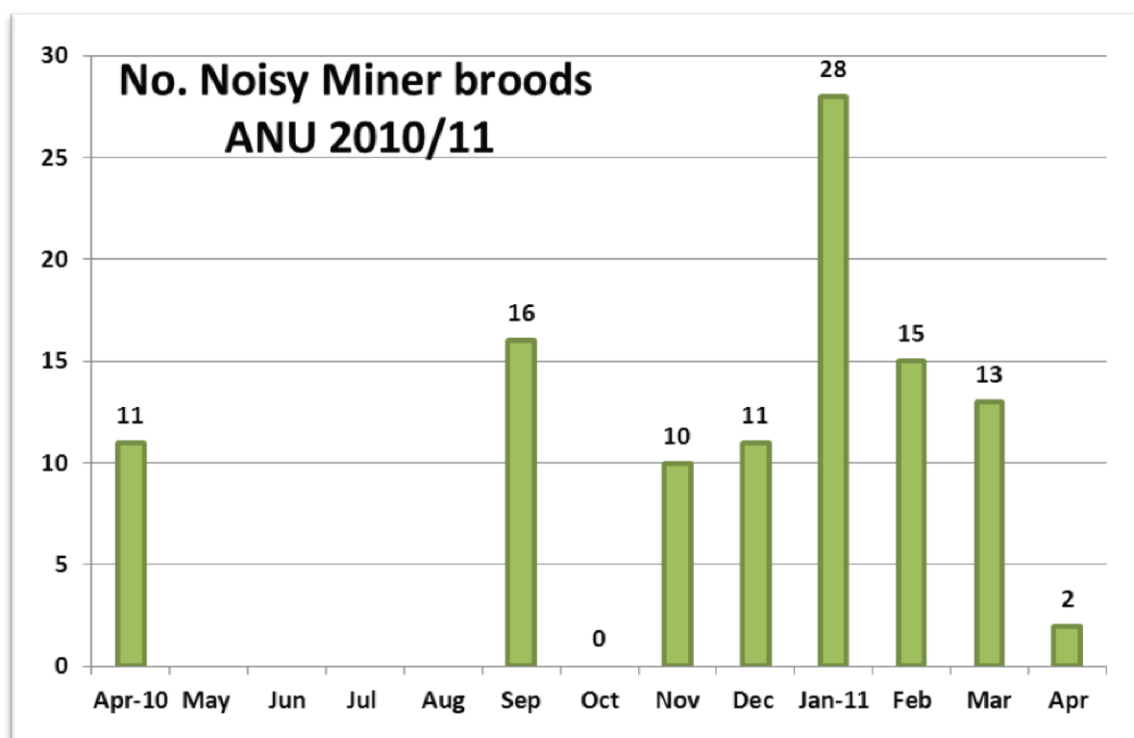
In my regular walks twice a week through parts of the ANU campus, I passed several sites where broods had been observed in April 2010. The times when begging young or nests were noted along this route in 2010/11 provided the impetus to extend the survey to the full campus area.

All first observations of nests or fledglings at a given site or time were plotted on a map of the campus and the locations described by roads and nearest buildings or other landmarks in my notes. I did not try to specifically locate nests. The few that were found were monitored until the young had left the nest (if successful). Most sets of fledglings were visited at least one more time after their initial discovery. When fledglings were first encountered the length of the tail compared to that of an adult was estimated and recorded as a measure of the age of the nestlings, i.e. how recently they had left the nest. Such a feature also helped to separate the broods when groups of fledglings from different nests were seen quite close to each other. I relied largely on the begging calls of the young to find broods. *In this survey only broods that had succeeded to the fledgling stage (hereafter referred to as "BFs") were included.* The number of reported BFs is considered to be the minimum.

##### 3.2.2. Number and seasonal distribution of broods

During the 2010/11 breeding season a total of 95 BFs were located (Fig. 2). They were recorded from the beginning of September 2010 until the beginning of April 2011. A group of 16 females started breeding early and at a similar time. Their young fledged from 2 to 14 September. As it takes about 40 days from nest building to the appearance of fledglings, these females must have already started nesting from late July to early August. In general, breeding (eggs in nest) in our area starts in September (Wilson in Frith 1976) although the COG Atlas

noted active nests from the middle of August (Taylor and COG 1992). In the GBS, dependent young were recorded from the last week of September (Veerman 2006).

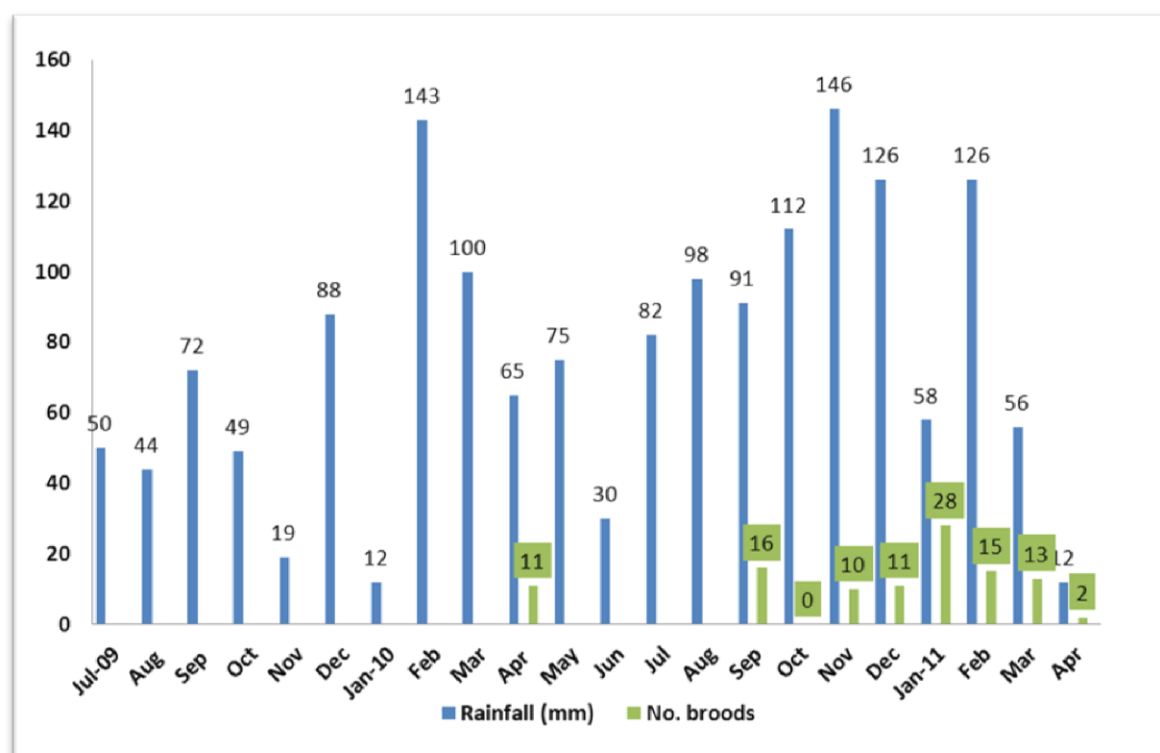


**Figure 2. The number of Noisy Miner broods with fledglings (BFs) in the 2010/11 breeding season at the ANU campus.** Note: The late broods from the 2009/10 breeding season in April are also shown.

The next records of BFs at the ANU were from November. For this month and December only 10 and 11 new broods respectively were discovered. But in January the number of BFs reached a notable maximum for the season of 28. This corresponds to the time of most fledgling records from the GBS for suburban Canberra (COG 2009). In February 15 and in March 13 BFs were discovered. The breeding season finished with two more BFs in early April (Fig. 2).

Rainfall patterns in 2010/11 may well have contributed to the timing of breeding events at the ANU campus, although this has to remain speculative (Fig. 3). Relatively good rainfall of between 82 to 98 mm in July/August (after low rainfall in June) must have been considered sufficient for a cohort of females to start the first broods of the season in late July/early August, resulting in fledglings in September. But environmental conditions were probably not adequate for the majority of females and the next BFs were only recorded at comparatively low numbers in November and December. High rainfall (>100 mm) for each month of October to December would have facilitated the notable peak in BFs for January and ongoing breeding activity through February and March and even a couple of BFs in early April (the latter a possible consequence of high rainfall in February). In general, breeding within a colony of Noisy Miners is not necessarily synchronised, except perhaps between neighbouring females (Dow 1979b).





**Figure 3. Rainfall (mm) at The Australian National Botanic Gardens from July 2009 to April 2011 and the number of Noisy Miner broods with fledglings (BFs) in the 2010/11 breeding season at the ANU campus.**

The 2010/11 breeding season of the Noisy Miner at the ANU extended from late July 2010 (start of nesting) through to early April with the last BFs. Those fledglings would have gained independence some time during May 2011. The ACT Atlas (Taylor and COG 1992) gives the length of the breeding season (active nests) for the ACT from middle of August until middle of December. Clearly, at the ANU the season can be considerably longer, and as the observations in April 2010 indicate, also longer than in suburban Canberra.

The 95 BFs produced a minimum of 144 fledglings (minimum 1.52 fledglings/successful brood). However, since in most cases the young were not observed when actually leaving the nest, but only hours to some days or a couple of weeks after they had fledged, the actual number would have been higher.

Observations on birds that are not individually marked make it impossible to reliably say how often a given female would have nested in this prolonged breeding season. It can be safely assumed that with such a long breeding season many females would have raised two broods. Some may have even raised three broods. At a couple of locations small young were encountered more than twice, e.g. at the Family Court Building on 2 Sep, 25 Nov and 17 Jan; at the tennis court on North Road/Barry Drive on 17 Sep, 18 Jan, 25 March; Ellery Crescent/Baldessin precinct 14 Sep, 14 Dec, 25 Mar. All other locations had only one or two broods assigned to them.

It is unknown how many nests at the ANU were started altogether and how many failed before fledglings could be produced. Nest failure rates can be highly variable. For example, at a site in SE Queensland eggs, chicks and fledglings suffered losses that could differ with

season although the pattern was not identical for the three categories. Nests situated at a lower height in the vegetation were more successful than those higher up (Arnold 2000b). Arnold's study site had a large guild of 19 potential predator species of eggs and young: possums (3), birds (9), feral cat and reptiles (6). Most daytime predators were mobbed by Noisy Miners (Arnold 2000b).

At the ANU the list of potential predators is much smaller: Brush-tailed Possum (*Trichosurus vulpecula*), feral cat, Australian Raven (*Corvus coronoides*), Pied Currawong (*Strepera graculina*) and Australian Magpie (*Cracticus tibicen*), and possibly in some parts of the ANU, Eastern Brown Snake (*Pseudonaja textilis*). During the day at least Australian Ravens caused most concern to Noisy Miners. Single ravens and later in the season raven families (at least 4 pairs at the ANU) were frequently mobbed.

### 3.2.3. Estimate of the ANU Noisy Miner population

A rough estimate of the minimum size of the adult Noisy Miner population at the ANU for 2010/11 can be made, based on three premises: (1) the time it takes from nest building to young fledging is about 40 days; (2) females rarely feed fledglings (Dow 1979b). [Hence from that point onwards they could start another brood although they may not do so immediately. But the number of broods in two consecutive months would certainly involve different females.]; and (3) the sex ratio for the species is typically 1 female for every 3 to 5 males.

This would mean that the 28 females from the January peak in BFs can be added to the highest number of BFs in the preceding or following month, i.e. the 15 BFs from February, (see Fig. 2), giving 43 females as the minimum number of breeding females. Taking the sex ratio into account, this is 43 females + 129 or up to 215 males, giving 172 to 258 adult Noisy Miners as a minimum population.

The Noisy Miner population in Canberra has steadily increased as indicated by the GBS data (Butterfield 2012). The first time I recorded Noisy Miners breeding at the ANU (at the Coombs Building) was in the early 90ties. Since then the population has steadily but slowly increased and spread out, now covering almost the entire campus. From there it has spread into Turner. Single foraging birds venture also more frequently into the CSIRO site along Clunies Ross Street. As yet the species has not entered the Australian National Botanic Gardens but is found close to it.

### Acknowledgements

The manuscript has greatly benefitted from comments by Janette Lenz and A. O. (Nick) Nicholls.

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**Noisy Miner bringing food to a fledgling, ANU (Michael Lenz)**

## OBSERVATIONS OF EASTERN KOEL FLEDGLINGS IN CHAPMAN/RIVETT DURING THE SUMMER OF 2014

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On the morning of 23 January 2014 Andrea rang me at work with great excitement as she thought she saw a female, or more likely, a fledgling Eastern Koel (*Eudynamys orientalis*) in our garden in Chapman.

We couldn't locate it when I got home but interestingly adult Koel activity was much more noticeable, with two males seen and heard in a large blue gum in our GBS site (on the edge of our block) just after 7 pm. What we later recognised as the fledgling was heard after this about 150 m away, in a garden at the corner of Darwinia Terrace and Rafferty Street, Chapman.

However, the following morning the bird was easy to locate in the very bushy garden of our near neighbours at 60 Darwinia Tce, and I was able to get good looks a number of times over a period of 3 hours or so. Even though it supported a very nice striped tail, it was clearly a fledgling, as it didn't fly very securely and most importantly it gave a constant, one noted repeated begging call. The pictures in HANZAB (Higgins, 1999) also supported this, in particular the lighter head colouring.

While Red Wattlebirds (*Anthochaera carunculata*) were around when I first located the bird there was no evidence of any feeding, in fact when close the wattlebird gave a growling type alarm call (why I first thought it might have been a female). However, with a bit more patience I was able to see a single Red Wattlebird feed it twice at around a 5 minute interval.

Interestingly I also had seen a new pair of Red Wattlebird fledglings (with quite short tails) in my GBS site the night before. This added to the much more mature fledglings that were still around after first being seen at the beginning of December. This made it three separate Red Wattlebird breeding "events" this summer, though I couldn't be sure any actually occurred within my GBS site as all records are of dependent young.

Also this was the first Koel breeding observation in my local area that I had recorded despite them having been relatively common over the past seasons. Interestingly it came after a summer of apparently reduced Koel activity compared with the past few years. While they had been calling in the distance (close to or >1 km) intermittently from the beginning of November and occasionally closer (but not within 400 metres), since Christmas I had only a single record of one calling within 0.5 km of our garden about a fortnight earlier.

By the end of the long weekend the fledgling was becoming increasingly conspicuous by its constant calling and was also relatively easy to approach and observe, with it often being in the Chinese elm in the garden of my adjacent neighbour at 58 Darwinia Terrace, within 20 m of our house, and with both the owner of 60 Darwinia Tce and me having seen more feeding by Red Wattlebirds, though sometimes the interval between presenting food was > 10 minutes. This included being fed in the gums on the wide street verge in Rivett across Darwinia Terrace. On one occasion while trying to confirm the host a Red Wattlebird was in the same tree for several minutes before flying off without offering food.

On my arrival home on Tuesday 28 January I could hear two begging calls, and see the above fledgling calling in my neighbour's Chinese elm, and trace the second to a seemingly smaller and sleeker (but still highly coloured) fledgling in the front garden of 47 Darwinia Tce, close to the corner of Angophora St Rivett, less than 200 m away. It too was subsequently seen being fed by its Red Wattlebird host, on one occasion pursuing it down onto the ground.



**Eastern Koel fledgling with its Red Wattlebird host (*Geoffrey Dabb*)**

Interestingly while I first thought they were calling to each other these birds were never seen together (though <100 m apart on a number of occasions) and from my observations never crossed into each other's "territories", with the second bird only seen in a rough triangle between a large gum tree at 4 Pavonia St, and the wide street verges of 39 Darwinia and just into 51 Darwinia Terrace Rivett, the latter being on the edge of my GBS site (see triangle on Map 1). The closest the two probably actually got together was on the afternoon of 29 January when it was at the latter spot and the one time the first bird crossed the bike/walking path on the N western side of our house and was first seen in parkland on the other side of 50 Darwinia Tce and then heard calling in the large red box of 52 Darwinia Tce (a battle axe block – see X on Map 1).

The second fledgling seemed to be a much better flier and was seen doing the asymmetric triangular circuit on a number of times (the largest leg being >100 m). It was last seen doing this circuit at 6 am on Saturday morning 1 February after which I didn't see/hear it again. However, PhD researcher Virginia Abernathy (personal communication) was able to locate it in Angophora Street Rivett on the morning of 3 February 2014 and record/photograph it for over an hour before it flew further down into Rivett. During this time she never saw it fed, so we assume that it had become independent.

By this time the other fledgling had become quite advanced and mobile and seemed to come in and out of my area during the day (unless it was silent for periods). When present it was quite bold and easy to locate when begging, and my neighbour at 60 Darwinia Tce, in whose garden it had spent most time, was thoroughly sick and tired of its constant begging and was seen trying to shoo it away a number of times.

Over the next week it got increasingly harder to find and was only heard before 7 am and round 8 pm, and also further away though I did manage to locate it on several occasions in Monkman St Chapman. Apart from that described above, during these 3 weeks my observations of this bird were confined to a rough rectangle (see Map 1) bounded by Darwinia Tce (either side), Rafferty and Monkman Streets and the bike/walking path which runs along the NW side of our house through an underpass and alongside 55 Darwinia Tce into Rivett.

By the weekend I thought the bird had left, so it was a surprise to suddenly hear it still begging loudly in a large planted ironbark on the verge of 55 Darwinia Tce (diagonally opposite No 60) around 6:30 am on Sunday 9 February. It flew reasonably well to 62 Darwinia Tce and shortly after an adult Koel could be heard calling very loudly close by, and it was traced to the above gum tree at 4 Pavonia St, where it was harassed by Magpie-larks (*Grallina cyanoleuca*) before flying towards Darwinia Tce.

Unfortunately I was unable to follow it. However, around 7 am Monday 10 February an adult was heard calling loudly in the blue gum just in front of our house and then a male was seen flying into the gum outside our bedroom seemingly pursued by a couple of other Koels, one of which made a very different call from that which I associate with adults and by now had become familiar with for the fledglings. I suspected females, but the one I was able to briefly get my binoculars on was a barred bird typical of a juvenile rather than the more spotted adult female.

I thought this would be the last time I saw a fledgling/juvenile in my GBS, though I did hear the same call during the week when a male again called close to our house. So it was again a surprise to first hear and then find a begging Koel fledgling close to the underpass on Bangalay St Rivett (diagonally opposite the Rivett shops, see circle on Map 1) at 7:15 am on Saturday morning 15 February. This is about 0.5 km from our GBS site and I suspected this was a third one as it was constantly begging and flew only short distances pretty clumsily (compared with ours at the end).

Again Red Wattlebirds were around and while I didn't actually see it being fed judging by the sounds it made it was possibly fed once. It looked more like the scruffier and larger 60 Darwinia Tce bird than the one centred on Angophora St which was quite sleek and well groomed by comparison. Again soon after adult Koels were calling close by adding further evidence to the suggestions of interactions between adult and fledgling/juvenile birds. I was able to find it easily again round 6 pm the next evening, where after watching it sitting and calling quietly for about 5 minutes a Red Wattlebird came in to feed it, thus confirming the host.

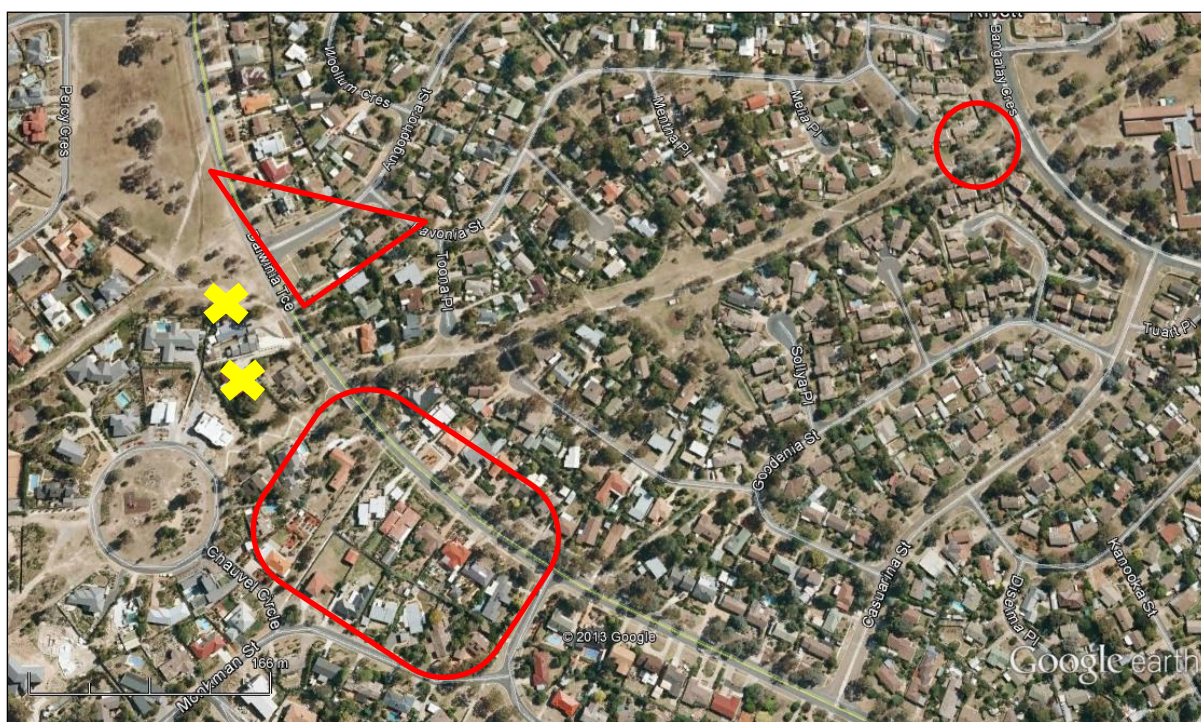
Despite a number of visits I wasn't able to find it again though Virginia Abernathy (personal communication) found it begging a few houses down from the underpass at 5:30 pm on Monday 17 February. She then followed it as it slowly made its way towards the underpass and got a pretty good video of it being fed several times. She thought both wattlebird parents



were there. It looked big to her, but the tail wasn't fully grown yet so she agreed it probably was different from the one she saw at Angophora St because that one was pretty well grown several weeks ago and as noted above was never fed while she was there.

An even bigger surprise was that on same Saturday evening of 15 February before 7 pm while following up some Satin Bowerbirds (*Ptilonorhynchus violaceus*) which at the time had dependent young in my GBS site, I found a fully independent juvenile Koel sitting quietly in a fig tree in the backyard of 4 Chauvel Circle with which our battleaxe block shares a corner. On the following Sunday night within the hour of seeing the new fledgling I found it again sitting motionless in the same fig tree as the night before, confirming that these were different birds. I also found it there on the Monday evening sitting quietly eating a fig, but not again despite many visits and the ripe figs attracting many birds, particularly Red Wattlebirds, Pied Currawongs (*Strepera graculina*), Silveryeyes (*Zosterops lateralis*) and the Common Myna (*Sturnus tristis*).

There was no adult Koel calling near my place during the time I saw this independent juvenile, so based on my observations the purpose and extent of their interaction with fledglings/juveniles remains unclear. It is certainly not constant, and as far as I could tell no adult was present when I suspect the independent fledgling departed. In fact I only heard a few distant calls until the end of February, and none in March, suggesting the adults left a little earlier than in previous years.



**Map 1. Locations of Eastern Koel Fledglings (see text for details).**

So despite the seemingly low Koel activity in my local area this season, at least three fledged locally. Now that I know the call I suspect there was one last year as well in the same shrubbery off the lane but it remained hidden from view (perhaps a younger bird?). However, I can't rule out this having been a fledgling Red Wattlebird, on many occasions in 2014 I heard a call that was somewhat similar to that of the begging Koel



fledgling (which I best describe as similar to that of a Little Friarbird *Philemon citreogularis*), only to discover that it was being made by the large almost independent Red Wattlebird fledgling.

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**Young Eastern Koel in nest of Red Wattlebird (Geoffrey Dabb)**

## INFLUX OF RED-NECKED AVOCETS TO LAKE GEORGE IN 2013

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**Abstract.** *In 2013 Red-necked Avocets appeared at Lake George in un-precedented numbers with a new maximum for COG's Area of Interest of 1180 birds in July. We also report on the number of ducks, notably Pink-eared Duck and Grey Teal, recorded at the same time during the monthly surveys. A notable maximum was reached in December with over 27 000 ducks. In 2013 many inland wetlands dried up and waterbirds moved eastward. If at such times Lake George and the nearby Lake Bathurst hold water they become significant drought refuges.*

### 1. Introduction

The number and the composition of waterbirds at Lake George are influenced by a combination of local conditions and the status of wetlands well to the West of our region (Lamm 1964). If inland Australia provides adequate habitat for feeding and breeding of waterbirds, their numbers and species diversity at Lake George tend to be low, although the lake itself may contain a lot of water. This was for example the scenario a few years ago. If on the other hand inland waters dry up, waterbirds move eastward and a variety of species in larger numbers may stop over on Lake George (although at times both, inland wetlands and Lake George may be dry at the same time, then birds will pass our area). Hence Lake George and similarly Lake Bathurst only a few kilometres to the NE, can be important drought refuges for waterbirds.

2013 was such a year in which Lake George provided habitat for many waterbirds in fluctuating numbers as wetlands to the West of our region dried up. The ephemeral lake, which had been dry for some years, begun to fill in 2012. From July to early September 2013 the water level again began to fall significantly. Late in September and during November the lake experienced some influxes of water, but dried up quickly thereafter and was without any water by January 2014.

We report here of a notable influx of Red-necked Avocets (*Recurvirostra novaehollandiae*) to Lake George in 2013 and for comparison also report the wide fluctuations in the number of ducks on the lake observed in the same period.

### 2. The 2013 influx of Red-necked Avocets

The Red-necked Avocet is an endemic nomadic species of inland and coastal Australia with a population estimated at 107,000 (Geering et al. 2007). Red-necked Avocets have only made irregular and infrequent appearances in the COG Area of Interest in the past 32 years of COG's electronic database where they are featured in 92 records. Their presence was mostly recorded at Lake George and Lake Bathurst with the highest number being 150. Much smaller numbers have been recorded at Lake Burley Griffin (10), Kelly's Swamp (3) and Uriarra Homestead (1). Wilson (1999) cites several single bird sightings at Jerrabomberra in late 1967 and early 1968.



### **Red-necked Avocets (*Julian Robinson*)**

During 2013 Red-necked Avocets were seen at Lake George in greater numbers than have been experienced previously (Fig. 1). Both, Marchant and Higgins (1993) and Geering et al (2007) show a major population centre of the Red-necked Avocets to the west of the ACT. It is highly likely the avocets have come from that region. There drought continued while the Lake George catchment experienced sufficient rain for water to replenish the underground reservoirs and to appear in the lake itself.

First just two birds were sighted on 6 January, but from February to late May on average 700 avocets were present. By June avocets had left Lake George. The species re-appeared in July in the largest number to date of 1180. Thereafter numbers declined steadily to around 200 birds for October and November. In December as the lake receded rapidly it attracted 590 avocets (Fig. 1). In early January we could see no water. The avocets and other waterbirds were gone. We saw cattle and sheep grazing amongst dust swirls.

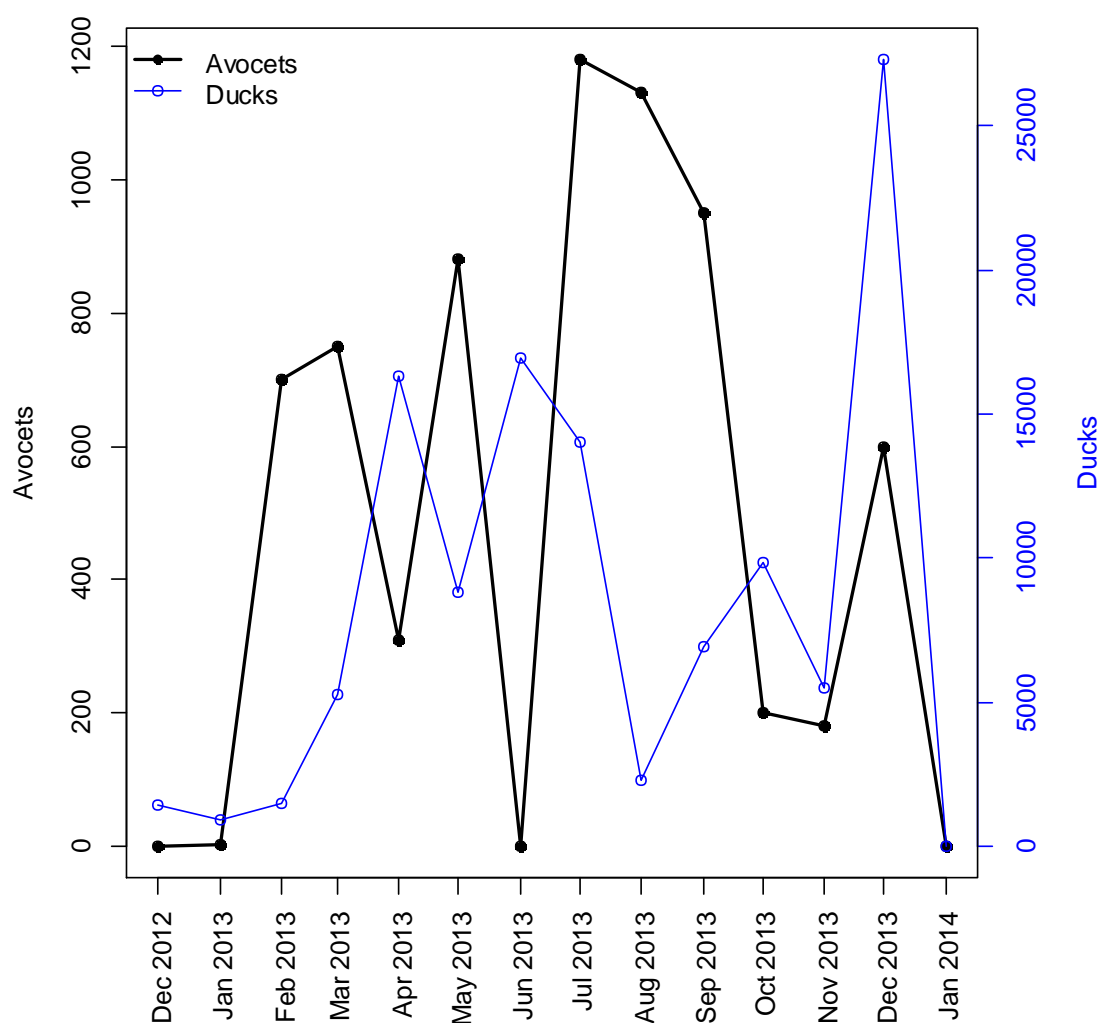
The avocets were observed mostly on the shallow margins on the eastern shore of Lake George, spreading further out away from the shoreline as water levels fell. In April they were seen together with 115 Black-winged Stilts and in early May with 36. Often they were recorded as a single flock, at other times they had split up into several smaller groups feeding or resting widely apart from each other.

Numbers, distance and light often made individual avocets difficult to distinguish. At other times their features were clearly observable and reflected in the shallow water beneath. Breath-takingly beautiful were their group flights over the water after being disturbed by raptors.

### **3. Numbers of ducks**

The numbers of ducks also fluctuated widely in 2013 (Fig. 1), probably for similar reasons as outlined above. At the same time the species composition changed (Table 1). Freckled Ducks dominated early on, but later in the year Grey Teals and especially Pink-eared Ducks were attracted to the lake.

There were notable fluctuations with high numbers above 10 000 ducks in April, June/July and with over 27 000 in December, just one month before the lake dried up. It is likely that birds at different peak times may also have originated from different source areas as inland wetlands progressively dried up.



**Figure 1. Numbers of Red-necked Avocets [filled circles] and ‘ducks’ [open circles] (mix of species, see Table 1 for details) recorded during monthly surveys in 2013 at Lake George. Note different scales for avocets and ducks.**

High numbers of Red-necked Avocets did not necessarily occur at the same time as those for ducks. In fact except for December when both groups of waterbirds reached maxima, Red-necked Avocets showed maxima at other times than ducks did. However, we do not imply at all any causal link between the movement patterns of both groups of waterbirds.

### Acknowledgements

The data for this report was collected as part of the long term waterbird study of Lake George and Lake Bathurst organised by Michael Lenz on behalf of COG since 1980. The records from the COG data base were provided by Steve Wallace. The graph was prepared by A. O. Nicholls. Thanks go to Ruth and Sue Corrigan, Brian and Marcia Osborne and Tom Keatley, all generous members of the Lake George Community.

**Table 1. Number of ducks and the percentage of the total for the more common species on Lake George.**

Month	Total no. ducks	% of total no. ducks				
		Freckled Duck	Pink-eared Duck	Aust. Shoveler	Grey Teal	Other species *
Dec 12	1460	91	5	---	3	1
Jan 13	910	79	..2	---	10	9
Feb 13	1515	7	7	3	84	3
Mar 13	5255	11	25	1	62	1
Apr 13	16260	---	22	4	74	<1
May 13	8800	---	40	2	58	0
Jun 13	16960	---	60	---	40	<1
Jul 13	14030	---	59	---	41	0
Aug 13	2320	1	49	---	50	<1
Sep 13	6950	1	70	---	28	1
Oct 13	9850	7	77	---	16	0
Nov 13	5500	---	91	---	9	0
Dec 13	27300	---	68	---	32	0
Jan 14	0	---	---	---	---	---

\*Other duck species: Australian Wood Duck, Chestnut Teal, Pacific Black Duck, Hardhead, Blue-billed Duck

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## NOTES

### BIRDS AND HEAT STRESS: THINKING GLOBALLY BUT ACTING LOCALLY

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The air temperature in Gungahlin exceeded 40°C on 16<sup>th</sup> and 17<sup>th</sup> January 2014 and again on 2<sup>nd</sup> February, remaining in the high 30s on surrounding days. On 17<sup>th</sup> January I took my usual walk quite early while it was still relatively cool, across Ginninderra Creek and up the slopes of Percival Hill. I found many small birds dead, often beneath trees as if they had fallen from them. I did not at the time think to identify all of them precisely, but among them I recognised many Red-browed Finches, all juveniles lacking the adult scarlet 'eyebrow'. They were part of the large flock of over 50 finches here with many new young birds this season.

My home backs onto Ginninderra Creek and Percival Hill. On returning home I watered my vegetable patch and was surprised to see small birds coming to the wet plants, not something I had seen them do so fearlessly before. This gave me the idea of putting the sprinkler on and wetting the shrubs and small trees. Small birds flocked to the wet foliage immediately, fluffing up their feathers to absorb the moisture. That day I counted over 100 small birds in the wet shrubbery and I continued the process over several days. At any given time, I could count Red-browed Finches (30) including dependent young, Superb Fairy Wrens (20), Silvereyes (20), Striated Thornbills (15), Yellow-rumped Thornbills (12), House Sparrows (12), Buff-rumped Thornbills (10), Brown Thornbills (8), Grey Fantails (6), White-throated Gerygones (4), Weebills (4), Eastern Yellow Robins (3), European Goldfinches (3), Western Gerygones (2), Double-barred Finches (2), Eastern Spinebills (2), Willie Wagtails (2), Australasian Pipits (2) and a single Striated Pardalote.

Larger birds did not come to the wet foliage but the Magpies, Currawongs, Rosellas, Ravens, Magpie-larks and others continued to use my bird bath. Smaller birds are wary of the deep water and for this reason many Canberra bird-lovers have commenced putting out water for them in shallower containers.

Massive deaths of heat-stressed small birds have been reported in the past, the most notorious being the cataclysmic deaths of birds in inland Australia in the heat wave of 1932 (Finlayson 1932). Birds died in their thousands, perhaps millions, at drying-up water holes. Thousands of Zebra Finches desperate for shade invaded a train at Rumbalar Siding and one cattle station owner claimed to have removed and burned 5 tons of Budgerigars from his bore (Chisholm 1934).

The threat of global warming will make such disasters more common. Too little attention is given to this in the discussions surrounding climate change. If Australia does indeed become hotter and drier, birds will be among the first victims. Thankfully, this important issue has just begun to be raised in ornithological journals (McKeknie et al. 2012) and websites (<http://www.birdlife.org.au/australian-birdlife/detail/the-heat-is-on>).

Recent years have seen increasing reports of bird deaths. In January 2009, a severe heat wave caused the deaths of thousands of Budgerigars and other birds, said to have carpeted the ground at the Overlander Roadhouse between Geraldton and Carnarvon in Western Australia (<http://www.perthnow.com.au/news/thousands-of-birds-die-in-sweltering-heat/story-e6frg12c-1111118551504>). Exactly a year later, just one intensely hot day caused widespread mortality among birds in and around Hopetoun. This event was of significant concern to bird lovers because it included the deaths of at least 208 endangered Carnaby's Black-Cockatoos, over 100 of them on the Hopetoun golf course.

Climate change and its effects are huge, global issues. All bird enthusiasts should be concerned about the environment and should think globally, involving themselves in studying the crucial issues and promoting awareness. But the solutions are very long-term, certainly beyond my lifetime.

In the meantime, we can still act locally. We can still make life bearable for small birds in our neighbourhoods during very hot weather. Shallow containers of water and early morning wetting of the garden will save the lives of more birds than most of us realise.

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*Accepted 15. February 2014*

## AN UNUSUALLY COLOURED PACIFIC BLACK DUCK

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On 23 March 2014 David McDonald (DMcD) posted a message to the COG email discussion list about a leucistic Pacific Black Duck (*Anas superciliosa*) which he had observed on a farm dam in Wamboin NSW. The overall appearance of the bird reminded Martin Butterfield (MAB) of one that he saw on Kelly's Swamp, Jerrabomberra Wetlands on 18 July 2011 (some 32 months earlier). (An alternate theory that the bird might be a hybrid Pacific Black Duck x Mallard was rejected as the bird shows no Mallard attributes such as curled tail feathers.)

DMcD provided MAB with a higher resolution image of his bird enabling preparation of this composite with the 2011 bird as the inset.

The two birds appear to be differently coloured, but in the opinion of Geoffrey Dabb, a very experienced photographer, that could easily be explained by differences in lighting, camera, or plumage due to successive moults. He felt that it could well be the same bird or a close relative in both images.





In response to MAB's 2011 post to the discussion list about the bird Chris Davey responded with a post "As it is so distinctive it would be a good bird to keep an eye on to see where else it goes to around town." However no sightings have been reported until that by DMcD.

The Wamboin bird was observed 18 km in a straight line from Kellys Swamp. This is obviously well within wandering range for such a bird, and there are many water bodies in the vicinity of Wamboin on which it could have located.

HANZAB is silent on the longevity of this species, but Birdlife International has a web-page for this species (<http://www.birdlife.org/datazone/speciesfactsheet.php?id=440>) which states that "Adults live 21 months on average in New Zealand, but the oldest bird in the wild was at least 20 years of age." A Western Australia study estimated that adults of this species have an average annual survival rate of 63 % (Halse et al. 1993). By either measure, if this is the same bird, it has done well to survive this long.

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*Accepted 26 March 2014*

## **SULPHUR-CRESTED COCKATOO/LITTLE CORELLA HYBRID**

SANDRA HENDERSON

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In 2012 my neighbour in Wanniasa photographed a bird keeping company with the Sulphur-crested Cockatoos in his backyard that appeared to be a hybrid Sulphur-crested Cockatoo/Little Corella. The bird had a small yellow crest, and a blue eye ring.

Since then I've also had reports from members in Hughes, O'Connor and elsewhere in Wanniasa who have also seen what seemed to be a hybrid between these two species, and earlier this year I saw one at Callum Brae. The birds are usually with other Sulphur-crested Cockatoos. Joe Forshaw was of the opinion that these are certainly hybrids, and likely to become more common as Little Corellas become more common (Email correspondence Oct 2012).

Hybridisation occurs between various parrot species (e.g., between Crimson and Eastern Rosellas, and between Galahs and various cockatoos) and some aviary breeders of parrots have encouraged hybridisation. A wild Sulphur-crested Cockatoo/Long-billed Corella was photographed in 2009 (see:

<http://www.feathersandphotos.com.au/forum/showthread.php?5829-Cockatoo-Hybrid-ever-been-seen-before>)



**Sulphur-crested Cockatoo/Little Corella hybrid [on right] (John Bundock)**

*Accepted 30 May 2014*

## AUSTRALIAN REED-WARBLERS CATCHING AND EATING FISH

SANDRA HENDERSON

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On the COG Wednesday walk in February 2014 at the Queanbeyan sewage ponds, a number of the participants observed an Australian Reed-Warbler (*Acrocephalus australis*) feeding a small fish to a dependent young. This was considered unusual, because every reference to the diet of this species mentions that they take insects, and occasionally snails, but none mention fish. We did not observe the bird catching the fish, but there were large numbers of tiny fish visible in the ponds.

Some non-Australian members of the genus *Acrocephalus* are known to take small fish and frogs, but I could find no references to Australian Reed-Warblers doing the same.

*Accepted 30 May 2014*

## THE VALUE OF OLD SUBURBAN GUM TREES FOR BREEDING BIRDS

EVAN BEAVER

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I have often heard birders, and foresters actually, talk about the value of old trees. That a forest of a couple of hectares of young trees is great, but a paddock with a big old gum tree might be worth more. At our new house in Kambah we had an excellent demonstration of what that looks like.

We are on the NW fringe of Kambah, near the southern end of Coolemon Ridge. Across the road from our house is a reserve of sorts, bushland on public land. The 2003 bushfires swept through this reserve, and to a small degree our front yard, burning most vegetation to the ground. The bush now consists of a mixture of eucalypts, all about ten years old I would guess and no understory to speak of. We were not here to see the regrowth so I am not sure if they were planted after the fire or before and survived. There are a few slightly older ones in the mix with burnt bark, so maybe it is a mix of both. Among these trees though two massive eucalypts stand out, big scraggly scribbly barks, set out from the forest on the side of the road. I guess they are at least 90 years old, maybe much older.

Like all good eucalypts these are both covered in broken branches and hollows, with weird folds and crevices in the bark and tea-pot spouts higher up. These trees are just across the road, and so are quite easy to observe and I remain surprised at the attention birds give these two trees above all others. Last summer alone we saw ten different species of bird nest successfully between them. Two were not great, but Common Mynahs and Common Starlings both bred in holes between folds in the bark. Eastern Rosella, Crimson Rosella, Galah, Striated Pardalote and Sulphur-Crested Cockatoo all made homes in large broken branches and hollows. Magpie-larks made one of their distinctive mud nests on one of the large boughs and the vigilant and territorial Red-Wattlebirds made a home with 5 other species which led to a busy summer. The last were our favourites, a pair of Australian Ravens

who built their massive stick fortress next to what looked like last year's effort. At least one bird of this pair is easy to identify as it has a white feather among the primaries. They have come back again already this year 'sniffing' around the tree. I like the ravens as an around-the-house bird. They are not too noisy, their bulk can be a spectacular surprise in the back yard or on the roof and every now and then they would fly over the house with a chook egg in their beak, I think someone up the road has a badly secured chook house. Even better, I chased a fox off our property early one morning and one of the ravens finished the job for me, chasing it 500m up the road and pecking it repeatedly on the head. I have never seen a fox so scared.

Those are just the birds that I know bred in the tree. Willie Wagtails check it out regularly and might have even snuck in a brood that I missed. Grey Butcherbirds nested in an exotic tree across the road but roosted and called loudly from one of the eucalypts. Aussie Wood Ducks were checking out one of the forks for a few days but settled on property elsewhere. Magpies and Currawongs have also been frequently in the area and I wouldn't be surprised if they move in next year.

Apart from the Butcherbirds, I didn't see another bird nesting within about 100m of these trees. They were a magnet for them and the centre of much of the bird activity in the area. I have seen some 'council types' looking suspiciously at the two big trees recently and wonder if they are thinking of removing them. If they do they'll have to unchain me first.

*Accepted 3 June 2014*

## ***COLUMNIST'S CORNER***

### **Birds in three gardens**

On the bird shelves of the second-hand bookshops a large volume is sometimes seen: "Birds in my Indian Garden", authored by Malcolm MacDonald (1901-1981). Published in 1960, this book offers a slice of bird-watching history. Malcolm was a son of Ramsay MacDonald, first UK Labour Prime Minister, and was a Minister in Churchill's National Government of the 1930s. He was High Commissioner to Canada during World 2, while there writing a smaller book about the bird life of Ottawa.

MacDonald's garden book tells the story of 3 years bird-observing in the grounds of his High Commissioner residence in Delhi, yielding 136 species seen 'in or from' the 3 acres. The book is a month by month account of the species that occur in the garden over a full year. The book's photographer, Christina Loke as she then was, achieved some fame with her photos of nesting birds taken over four months during Delhi's hot season. The historical interest here is that they are striking examples of the once-popular but now unfashionable practice of nest photography, taken with a lens of modest length from a hide a few feet from an active nest.

As the photographer complains, the erection of the hide might - and sometimes did - cause the parents to desert the nest for some hours, or even *days*. Moreover, as the aim is to capture a bird in flight or bringing food, a tight-sitting bird is inconvenient. A companion volume, *Birds in the Sun* (1962), describes an uncooperative White-eye: 'even when she clapped her hands, called aloud, or sparked the flashlamps within three feet of the bird, in attempts to disturb it, it continued stolidly sitting there'. In the end an assistant was called on to

repeatedly flush the bird, so Christina could snap it going and coming. Such a technique, if used today, is unlikely to be publicised.

My second garden is described in one of Australia's chattily informative bird books, *A Garden of Birds* (1988) by nature writer and field guide author Graham Pizzey (1930-2001). This garden was a 'half-hectare' at Mount Martha on Victoria's Mornington Peninsula. Pizzey recorded 60 species of *native* birds 'in or round or above' during a 12-year period.

By contrast with Macdonald's large tally, that is about the number you might expect 'in or round or above' a well-vegetated and favourably situated Canberra garden over a similar period.

Pizzey's count included many species that are common enough around Canberra: in the high canopy, Spotted Pardalotes and Striated Thornbills, chiefly evident in autumn, and White-naped, sometimes Yellow-faced, Honeyeaters; feeding on branches and trunks – Grey Butcherbirds, Kookaburras, Grey Shrike-thrushes; the denser shrubberies used by Brown Thornbills, White-browed Scrubwrens and Superb Fairy-wrens; the lawns by Magpies and Magpie-larks and, surely a highlight, for any Canberra garden, 'also Scaly Thrushes and Brush Bronzewing'. However those two species, even in the 1970s, 'became rare in the district as it became overdeveloped'.

Pizzey's White-faced Heron hunting at the garden pond will ring a bell with some Canberrans, as will 'the first flocks of White-throated Needletails ... slicing in low curves like flung sickles, down over the garden with a rapid swick of wings, then racing skywards' – perhaps a rather closer encounter with the species than in most Canberra gardens.

No Black Kites at Mount Martha, though, at least in those days. In Malcolm MacDonald's garden these common and intrusive birds stole buns from the table and cake from the hand. However, it is a species Canberra shares with Delhi (just). There are 8 records of single Black Kites in the Garden Bird Survey records, including one in 2013.

Now, a short note on a south Canberra garden (mine). Usually, and again in this past year (2014), the interesting days are those of late summer, say the six weeks from early February. Transient woodland birds appear: Superb Fairy-wrens, Brown Thornbills, Dollarbirds, a female Leaden Flycatcher. In a nearby reserve an Eastern Koel fledgling had been raised by a pair of (the popular adjective is 'naïve') Red Wattlebirds. In early March a pair of Koels still haunt the tall street eucs, their movements lethargic, although they utter occasional excitement cries.

King Parrots return with their begging young. Flocks of Rainbow Lorikeets, slender and busy, dash about noisily. A month earlier these had been attracted to the fruit of neighbourhood loquat trees, squeezing fragments of the fruit between tongue and bill for the sweet juice.

The Gang-gangs make an even noisier reappearance, some in groups of a dozen or more, feeding on eucalyptus capsules and fruiting Chinese Pistachios. Most of these are young birds, apparently learning about new food sources for the first time.

In previous years, Satin Bowerbirds had turned up only briefly as they explored new gardens in their post-breeding wanderings. This year, a group of five green birds was regularly in the front garden, a main attraction being the bright red berries of a viburnum.

The insistent trilling bleat of a displaying bowerbird was a surprise. ‘Something new here’, I thought, mentally planning an Odd Ob for Canberra Bird Notes under the title ‘Bowerless Display in the Satin Bowerbird’. But no – there was the previously unnoticed bower, evidently a recent construction, tucked away in a tangle of shrubbery by the nature strip.

The adult male displayed to an audience of four individuals, a female, a pale-billed sub-adult, and two younger black-billed birds. After a few days one of the latter could reproduce the display, with imitated movements and the trill, very like the adult.

By late March, the bower is gone, perhaps transplanted to a nearby garden. The Koels have also gone, and the visits by Rainbow Lorikeets and Gang-gangs are briefer and less frequent.

*Stentoreus*

## Birding in Cyberspace, Canberra Style

Without doubt the biggest event in cyberspace in the first half of 2014 has been **the launch of the Canberra Ornithologists Group’s new website**. It is found at the same URL as before the upgrade [www.canberrabirds.org.au](http://www.canberrabirds.org.au). I won’t detail its contents—check them out yourself—other than to say that it maintains the strengths of the old site and adds to it in diverse ways. It provides new resources for COG members, and is a sure winner for the internet-using community generally. Our thanks go to David Cook and, before him, Mike O’Shaughnessy, for building and maintaining the old site over many years, and to Julian Robinson, Michael Robbins and others for the huge efforts they have put into building the new site. I look forward to hearing from the new webmaster, Julian Robinson, about usage patterns, data that can be derived from resources such as Google Analytics [www.google.com.au/analytics/](http://www.google.com.au/analytics/).

While on the topic of analytics, there has been recent discussion on the national birding email list Birding-aus [www.birding-aus.org/](http://www.birding-aus.org/) about the amount of **Australian content on xeno-canto** [www.xeno-canto.org/](http://www.xeno-canto.org/). We have discussed this fine citizen science resource before in this column. Its mission is ‘Sharing bird sounds from around the world’. ‘Whether you are a research scientist, a birder, or simply curious about a sound that you heard out your kitchen window, we invite you to listen, download, and explore the bird sound recordings in the collection. But xeno-canto is more than just a collection of recordings. It is also a collaborative project. We invite you to share your own bird recordings, help identify mystery recordings, or share your expertise in the forums.’

In early May a Birding-aus correspondent wrote ‘Xeno-Canto approaches 9,000 bird species with sound recordings. Currently sitting on 8,989 bird species. Could you help?’ Well, it seems that plenty of people answered his call. At the time of writing, mid-May 2014, the site has 170,976 recordings covering 9,013 species and 8,126 sub-species, from 1,752 recordists (recorders?), totalling 2,169 hours of recording time. Australia is well represented with 2,433 recordings covering 464 species from 57 recordists, totalling 23 hours of recording time.



Enough of listening to bird calls on your computer, what about doing it in the field as part of the **Bird A Day** quest? For the full story visit [www.birdaday.net/](http://www.birdaday.net/). Russell Woodford, the manager of Birding-Aus, wrote about Bird A Day on 28 December last:

‘I received this reminder about Bird A Day, and thought I’d share it with Birding-Aus readers. It would be great to have a much bigger group of Australian participants in 2014. This year [2013], Alan Gillanders almost beat the whole world, falling just short of a perfect year on December 19 (with 352 birds). John Kooistra recorded a different bird for 294 consecutive days, and Stephen Murray, for 254 days. I was completely thrilled to get to early July and 191 days/birds.’

So what is this about? The facilitator (Trey Mitchell from Miami, Florida) describes it thus: ‘Since the New Year is upon us, why not try something different this coming year. Bird A Day...offers a personal challenge that will cause you to see and enjoy more birds in the new year than you might if you don’t participate. Bird A Day...challenges you as you see how many days in a row [commencing on 1 January] you can see/hear a different bird species. The Bird A Day...website helps you track your effort and allows you to share how you are doing with others as they do the same.’

The global champion for 2013 was Brennan Mulrooney from San Diego County, California. He observed a new species on each of 2013’s 365 days. In 2012, a leap year, he observed a new species on all 366 days. As mentioned above, Alan Gillanders was Australia’s 2013 leader, observing a new species on each of the first 352 days which covered the period from 1 January to 14 December. A fantastic effort. Looking at the 2014 participants, I note just one from the Canberra region, Martin Butterfield who (when I last checked) had observed a new species on each day up to 9 May. Perhaps you would like to give it a go from 1 July to 31 December: see if you can get a new species on each day over that six months.

**Technological advances** continue to impact on many birders. Subscribers to CanberraBirds would have seen a link to a 10 May discussion in the New York Times [www.tinyurl.com/l7olrff](http://www.tinyurl.com/l7olrff) titled ‘It’s Gadgets vs. Eyeballs as Two Species of Bird-Watchers Clash’. The ‘two species’ are (1) those of us (your columnist included) for whom modern digital devices are an integral part of birding in the field and (2) those who eschew such aids on the grounds that anything more than binoculars and a paper field guide is cheating or, at least, not playing the game properly. Someone is quoted in the NYT article as saying ‘The day will come...when binoculars themselves will be able to identify birds. “That would be lame from a birding perspective,” he said, “because it would take the skill out of it”’.

The latest Australian technological advance was the much awaited launch, in April, of **the Android version of the Pizzey & Knight Birds of Australia app** [www.gibbonmm.com.au/tour/PKBA\\_Android.aspx](http://www.gibbonmm.com.au/tour/PKBA_Android.aspx). Apparently some people initially found difficulties installing it, but this was readily rectified and many positive reports are coming in from happy Android smartphone- and tablet-using birders. It costs \$49.95. Interestingly, the **Michael Morcombe and David Stewart eGuide to the Birds of Australia** [www.mydigitalearth.com](http://www.mydigitalearth.com), also available for both Android and iOS versions, continues to be very popular, with many birders saying they prefer Morcombe & Stewart to Pizzey & Knight. Does any reader know of a detailed, authoritative comparative review of the two apps? I have them both and use them interchangeable; each is fantastic.

Some might say that I have left the best for last, a resource described as ‘A revolution in ornithological reference works’: **HBW Alive** <http://www.hbw.com/>: ‘an online



comprehensive resource for (*sic*) all the birds of the world. It contains the contents of the acclaimed 17-volume *Handbook of the Birds of the World (HBW)* series'. For just €29.95 per annum (and a €20.00 one-off registration fee, waived much of the time) you gain '...access to the contents of the HBW including all species accounts, family texts, plates, audiovisual links, updates and related resources'. Do visit the site and check out the informative YouTube video on the home page. Then peruse the free samples of what is available to subscribers (the samples are changed monthly): 'Browse our species, families and plates samples before you subscribe'.

Features available at this excellent resource include

- Detailed information, illustrations, maps and other material on all the bird species of the world
- Contents constantly updated by professional editors and moderated user participation
- Highly customisable format to meet every user's needs and interests, allowing geographical filtering and inclusion of personal notes
- More than 50,000 videos, photographs and sounds conveniently linked for quick and easy access
- Easily track the scientific references in the work. Over 5,000 new references used in the updating process by the editors
- And more.

This seems to be a publishing gamble on the part of the HBW: will a sufficient number of people and institutions purchase subscriptions to make it viable? The 17<sup>th</sup> and final volume of the *Handbook* was published in 2013, it costs €212 or you can buy the full set for €2,803. So €29.95 per annum, just \$44, seems a tiny price to pay for such a magnificent resource. Would any reader care to subscribe and review it for *Canberra Bird Notes*?

***T. Javanica***

This column is available online at <http://cbn.canberrabirds.org.au/publications/canberra-bird-notes/>. There you can access the web sites mentioned here by clicking on the hyperlinks.

Details on how to subscribe to *Birding-Aus*, the Australian birding email discussion list, are on the web at <http://www.birding-aus.org/>. A comprehensive searchable archive of the messages that have been posted to the list is at <http://bioacoustics.cse.unsw.edu.au/archives/html/birding-aus>.

To join the *CanberraBirds* email discussion list, send an email message with the word 'subscribe' in the subject line to [canberrabirds-subscribe@canberrabirds.org.au](mailto:canberrabirds-subscribe@canberrabirds.org.au). The list's searchable archive is at <<http://bioacoustics.cse.unsw.edu.au/archives/html/canberrabirds>.

## BOOK REVIEWS

### ***An Eye for Nature: The Life and Art of William T Cooper.* By Penny Olsen**

National Library of Australia March 2014. \$49.99 rrp.

*Reviewed by GEOFFREY DABB, Narrabundah, ACT*

According to the jacket notes, Bill Cooper asked Penny Olsen to write this biography, and she agreed when asked a second time some years later, in 2010. Clearly the narrative is based on Cooper's own recollections and notes. Indeed the text reads like a memoir – really an autobiography in third-person person format. As a result, the story is more frankly personal than you might expect, about family relationships, personal feelings, a few misfortunes and the occasional illness.

Bill Cooper is certainly a home-grown artist. If you had an Australian childhood, more or less in the country, and had an intense early interest in birds, you might recognise a few things here: the fascination of any coloured illustrations you came across, the excitement of being given a copy of Cayley's *What Bird Is That?* and the hours spent examining it, the lure of the mounted bird and animal exhibits in any museum you could get to.

And then, much later, there was the stimulus of that remarkable book *Birds of the World*, published in 1961, that Cooper came across in 1966. His reaction to it has been shared by many others, non-painters included: 'He was bowled over by Singer's paintings and he thought *I could do this*. Thus inspired, he made his first serious attempt at a professional painting of a bird'.

There followed the milestones in that painting career: the illustrations for *A Portfolio of Australian Birds* (1968 - written by Keith Hindwood), the first of the ambitiously illustrated monographs with Joe Forshaw (1978 - *Parrots of the World*), followed by a series of volumes on other bird-families-of-the-world, work on these entailing considerable travel beyond Australia. Then, with the consequent wide recognition and acclaim, came work on commission on larger canvases. In the Olsen book, the illustrations for the monographs are called 'scientific' because of the necessary attention to detail, and the big canvases are described as 'larger looser work', no doubt Cooper's own terminology.

As a result of Penny Olsen's work, a little-known life story has now become known to many as a result of recent radio and television programs.

In a way Cooper's work on the birds of paradise forms the centrepiece of the book. This is the subject of David Attenborough's foreword where he writes that in the 'immediacy and vivacity' of Cooper's birds of paradise he had 'after a gap of 80 years ... taken up the tradition in which Gould's illustrators had worked and ... managed to lift it to new and unprecedented heights'.

Cooper made repeated visits to Papua New Guinea, first with Forshaw in 1970 when he managed to observe ten bird of paradise species in the wild. Cooper returned in 1972 for a 3-month expedition during which he saw 35 species of the combined birds of paradise/bowerbirds list.

It is quite hard to see birds of paradise in their natural haunts, and penetrating far into lowland or highland rainforest entails considerable planning and exertion, and enlisting of local knowledge. Cooper had organised this second visit himself for the purpose of his book on birds of paradise and bowerbirds. The book appeared after a third visit in 1974, Joe Forshaw having been asked by Cooper to write the text.

David Attenborough's admiration for the bird of paradise paintings led, ten years later, to the filming of an Attenborough documentary with Cooper at work, at his North Queensland home, among other things painting a resident Victoria's Riflebird. It emerged that Cooper and Attenborough had both, as boys, been inspired by the same plate in the same book, a reproduction of a Lesser Bird of Paradise.

### *The artistic content*

Many will find the illustrations the most striking and valuable feature of this book. They cover a wide spectrum of subjects and approaches, although necessarily only a small sample of Cooper's work. Very few of the 270-odd pages are without an illustration of one kind or other. To give you the flavour, there are five graphic offerings before you get to the start of Chapter 1: a landscape in oils with Rainbow Lorikeets (cover); an oil of a pet cat that damaged a loaned study skin (title page – the cat must have survived because the incident was in 1966 and the painting is dated 1972); pencil sketch of Red-backed Fairy-wren (copyright page); oil sketch of Purple Swampheens (next page); an acrylic of Lesser Birds of Paradise, and a photo with David Attenborough (illustrating foreword); then pencil sketches of a Grey Goshawk.

The photos and the many sketches are carefully arranged to fit the text. There is some unavoidable awkwardness in the chronological placement of the published artwork. Although he travelled extensively to study and sketch his subjects, Cooper did not visit South America, so a fine plate of two macaws, painted from skins for *Parrots of the World* in 1971, appears in the New Guinea section, as does the New Zealand Kakapo. Fortunately a very comprehensive index enables you to find, or re-find, any particular illustration.

Two things about Cooper's work are made very clear by this book: his versatility and his prodigious output. There are the early landscapes, and a selection of varied landscapes '1950s-2012' is included at the end. However other works might be described as 'landscape with birds', like the emu with chicks (p164), the Wedge-tailed Eagles (p202), the Brown Sicklebills (p238), and 'Morning on the Moor' with Yellow-tailed Black-Cockatoos (p240). For most of the bird subjects the background is plants, not a generalised green but a carefully selected species – or two. On the next page to the plate of the White-bellied Go-away Bird (a turaco) is Cooper's detailed drawing of, and notes on, the local fruit, carefully observed and then used in the plate.

Given such an eye and attention to detail it follows that Cooper's botanical illustrations, as those for Wendy Cooper's book on rainforest fruits, are meticulous, as well as beautiful. However the same adjectives might be used for the flowers, mammals, insects – and so on. The relentless attention to detail makes Cooper's sustained output over such a long period all the more remarkable. He is said to be a relatively quick worker. A 'scientific' work for a book usually takes a fortnight, perhaps a week if 'on a roll'. For a larger composition in acrylics or oils the average time is two to three months. Then consider (as we know from this

book) the time devoted to travel, observation, field notes and sketching. Among other adjectives for William Cooper, ‘industrious’, as well as ‘prolific’, will not be out of place. As to his global status, the dust jacket and the publisher’s leaflet quote Attenborough as saying ‘the best ornithological illustrator alive’. The Morpeth Gallery website has Attenborough saying ‘Australia’s greatest living scientific painter of birds, he is possibly the best in the world’. Attenborough’s own foreword says ‘arguably one of the greatest of all bird artists’. Taken literally, those statements do not all mean exactly the same thing, but any of them is high praise from any point of view.

This is a great book. It is worth a place on the shelf for the art alone. As Attenborough says, the paintings are ‘aesthetically deeply satisfying’.

**Booderee National Park: the Jewel of Jervis Bay.** By David Lindenmayer, Christopher Macgregor, Nick Dexter and Martin Fortescue; photographs by Esther Beaton  
CSIRO Publishing, Collingwood, 2014,  
ISBN: 9781486300426, 152pp., Hardcover, AU \$29.95

*Reviewed by KATHY WALTERS and JOHN GOLDIE, Watson, ACT*

This book describes the natural environment and the ecology of Booderee National Park at Jervis Bay, only 3 hours from Canberra. Booderee packs an extraordinary level of biodiversity into a small area (roughly 6500 hectares), with more than 260 species of terrestrial vertebrates and over 625 species of plants. This Park is the stronghold of some species of significant conservation concern such as the Eastern Bristlebird. The park also has many special features such as spectacular rocky coastlines, white sand beaches and pretty picnic areas making it a very popular place – amazingly it gets over 450,00 visitors a year which exceeds Kakadu and Uluru combined.

This book aims to provide a greater understanding of the relationships between the various ecological processes that influence the plants and animals of Booderee. The book is arranged around these key ecological processes – predators and predation, herbivores and herbivory, invasive plants and fire – emphasising the interactions between species, between vegetation and animals, and between disturbances and animal and plant responses. We were particularly taken with the chapters which highlight that there are often two parts to a familiar process, e.g. herbivores as well as what they feed on. The book describes how Booderee National Park is a functional natural ecosystem and, in turn, how management practices aim to improve environmental conditions and promote biodiversity conservation.

As an example, the chapter on the impact of fire on the ecology of Booderee we found very interesting. The potential impact of fire on birds has been a general conservation concern for many years. Australian heathland birds, in particular, are considered highly vulnerable to altered fire regimes. In the year after the monitoring program started a wildfire burnt out approximately half of Booderee and over 50 monitoring sites were burnt. You would think this would be a devastating blow to the research program, but they adapted their research and it actually provided them an unexpected opportunity to compare burned and unburned sites, allowing them to answer questions about biodiversity responses to fire.

Interestingly, the research regarding birds showed the bird ‘assemblage’ had fully recovered within three to four years after the 2003 fire. One of the key factors influencing this rapid recovery was the patchiness of the fire. Past research had suggested that eastern bristlebirds

were extremely sensitive to wildfire. Data gathered before and after the 2003 fire showed that bristlebirds persisted on burned sites or rapidly reoccupied sites provided there were surrounding unburnt patches of vegetation.

Although Booderee is relatively small it has an amazing number of predators. The book highlights how different species employ different foraging strategies and thereby affect the total environment. It talks about the obvious predators such as owls and raptors and also less obvious ones such as kookaburras, insectivorous birds - it's not often that we think of a Brown Gerygone as a predator – antechinus, bats, possums, reptiles and the exotics like the red fox. This is another aspect of this book that makes it so interesting that not only does it discuss the predators it also discusses the predation side of the topic and what affect the predators have on the insect populations, as well as the other wildlife.

We found the language and style easy to read. The book is richly illustrated with colour images from award-winning photographer Esther Beaton. The book will suit visitors to Booderee National Park as well as anyone with an interest in the natural history of this area.

**The Woodhen: A Flightless Island Bird Defying Extinction. By Clifford B. Frith.**

CSIRO PUBLISHING, Collingwood, 2013.

ISBN 9780643108707, 225pp, Hardcover, AU\$ 59.95.

*Reviewed by CHRIS DAVEY, Holt, ACT*

The publication of this book has an interesting history. Written by Clifford Frith from a partial draft manuscript by John Disney and Peter Fullagar and compiled from many official reports and documents Frith was in a perfect position to be able to review and reflect from afar on the success of the Woodhen project given his past experience and in-depth knowledge of the Rallidae family.

The book tells the story of saving the Woodhen, a flightless Rail endemic to Lord Howe Island. The bird was on the brink of extinction in 1980 with 15 individuals virtually trapped in unfavourable but predator free habitat; isolated on a plateau 875 m above sea level. The story of saving the Woodhen highlights many of the problems experienced by threatened species whether their numbers are small with a restricted distribution or their numbers are large but experiencing a significant decline.

The book contains 11 chapters and five appendices followed by an extensive bibliography of over 180 publications and an index.

Chapter 1 outlines the accidental discovery of Lord Howe Island in February 1788 by the crew of HM Brigg *Supply* on its way from Sydney to Norfolk Island and of the Brigg's return in March to find the island had never been inhabited by humans. The remainder of the chapter discusses the nature of the island and its subsequent settlement.

The second chapter titled 'Origins of Lord Howe Island and its wildlife' describes the island, its geology and vegetation and its unusual wildlife including the Lord Howe Island Stick Insect and its recent discovery and survival on Ball's Pyramid. A section of 5 pages describes the birdlife, in particular the landbirds, some now extinct. The section details the 13 species and subspecies of endemic birds, their status and causes of decline or extinction.

The section could have been more extensive with a more detailed description of the seabirds; a most important element of the avifauna on the island.

The next two chapters on Rails in general, their biology, origins and the evolution of flightlessness is well researched and most appropriately written given Frith's extensive work and knowledge on the Family.

Chapter 5 titled 'Early knowledge of the Woodhen, its demise and causes' is a depressing read not only for the past events but the fact that today the same processes continue to occur throughout the world despite our much greater knowledge of the effects of habitat clearing and alteration, introduction of exotic species and various other threatening processes. In the case of Lord Howe Island Frith describes in detail the effects on the indigenous fauna of the release of cats, dogs, pigs, owls, goats and rodents. It is estimated that 65 years after discovery the Woodhen, once throughout the island, was now restricted to the mountainous regions of the island. Frith highlights the fact that the greatest threatening process to the Woodhen has been the activity of humans.

The next chapter 'Assessing the post 1930s Woodhen population' describes the early work of modern ornithologists on the island from 1936 onwards but it was not until 1969 that initial surveys highlight the demise of the Woodhen. An extensive survey of the island between 1971 and 1975 conducted by the Australian Museum on the flora and fauna of the island led to the realisation that the population was not in the region of 150-200 pairs as had been previously reported but rather at extremely low numbers restricted to the summit of Mt. Gower. This chapter describes the critical survey work and population estimates of Disney (Australian Museum), Fullagar and others and of the essential work by Ben Miller (NSW National Parks and Wildlife) on the biology of the Woodhen, in particular its food requirements and predators. These studies led to an understanding of the critical role of pigs in regulating Woodhen numbers and distribution and that rodents were not a factor in population regulation.

Chapter 7 describes the planning and implementation of the Woodhen captive breeding program under Glenn Lourie-Fraser and the importance of the Foundation for National Parks and Wildlife, a not for profit charitable organisation, in raising the \$300,000 needed. In addition the essential in-kind contributions provided by the NSWNPWS and the Lord Howe Island Board is also detailed. The chapter describes the initial work including the eradication of cats, pigs and goats that was required before the start of the captive breeding program.

Chapter 8 discusses the revival of the Woodhen population after the release of captive-bred birds in May 1981 and of the long-term study from 1984 to 1987 by the NSWNPWS under Robert Harden; a period of systematic and repetitive survey work including banding to assess distribution and breeding success. Chapters 9 and 10 discuss the results of this and previous essential work on the understanding of Woodhen ecology, behaviour and breeding biology.

The final chapter describes the future of the Woodhen bearing in mind a single population and in the face of the proposed rodent eradication programme set for 2015. Rodents are a significant biological feature on the island and although accidentally introduced, rats in particular play a major role in population regulations of other species. Frith discusses the possible profound effects of rodent eradication on the flora and fauna of the island.

For those readers interested in the details of the captive breeding program, a detailed account is provided in Appendix 1 whilst Appendices 2 to 4 provide a comprehensive bird list of the Lord Howe Island Group, of the nomenclatural history of the Woodhen and finally a most interesting list of bird species saved from likely extinction.

The book is a well-written, detailed account of one of the first successful reintroduction and captive-breeding programme in the world. The book emphasises the importance of a thorough understanding of the ecology and of the threatening processes in bringing the Woodhen back from the brink of extinction and highlights the importance of long-term research by a group of dedicated professional and amateur researchers. A major lesson to be learned from the project is that small populations of threatened species are not necessarily restricted to their optimal habitat. Various threatening processes often restrict populations to sub-optimal habitats and any replication of that habitat may doom any translocation or captive breeding programme to failure. The Woodhen project was one of the first to establish aviculture as an integral conservation tool which highlighted the importance of breeding success by captive-bred rather than wild caught birds.

The book is more than the story about a single species defying extinction. Rather, it highlights important ecological considerations that must be understood for any threatened species programme to be a success. This book should be read by anyone interested in biological conservation, habitat restoration or the management of threatened species.

## **RARITIES PANEL NEWS**

At its most recent meeting, the Panel considered 16 records. It endorsed 12 of them but was unable to endorse four records. All of the latter were entirely possible but could not be endorsed as the observers failed to rule out, to the Panel's satisfaction, alternate and more probable species. The records are most useful, however, should the species be sighted in the future.

It was most pleasing to endorse another Australian Painted Snipe record. This nationally vulnerable species has been recorded every year since 2011 in the Canberra region, possibly thanks to the wetter than usual conditions. It will be interesting to see whether it continues to be recorded in the predicted drier times.

The elderly (2002) Painted Honeyeater record needs an explanation. Following chat line and other discussion on whether the species had abandoned the Murrumbidgee corridor habitat for years prior to its resurgence this last spring, an English birdwatcher kindly produced a record there for the intervening years. Note that the PH has since been removed from the "unusuals" list.

Similarly the Little Friarbird is no longer on the "unusuals" list but, paradoxically, since being dropped it has become less recorded and its status may need to be reviewed. As always, when in doubt as to a bird's status, please submit an unusual bird report or check with the Panel secretary.

The appearance of a much photographed Singing Honeyeater in Bruce, and subsequently at West Belconnen Ponds, was surprising, although as Wilson (1999) notes, "we are just outside



the normal range of this species". There have been very occasional records, mainly from our broader area of interest. The Black Honeyeaters, on the other hand, appear to be visiting the north of our area with increasing frequency.

Rowes Lagoon on the Federal Highway, when it contains water, appears to be the most likely spot to record Australasian Bittern in our region. Congratulations to Harvey Perkins for stopping to check for one and for reporting it. The Panel encourages others to do likewise. As for the Purple-crowned Lorikeets, it seems most likely that they were aviary escapees as the ACT is a considerable distance beyond the normal distribution of this species. They have been recorded in the ACT previously, however (see Wilson 1999).

### ENDORSED LIST 84, April 2014

**Australasian Bittern** *Botaurus poiciloptilus*

1; 14 Dec 2013; Harvey Perkins; Rowes Lagoon, Collector

**Australian Painted Snipe** *Rostratula australis*

2; 1 Jan 2014; Julian Robinson & Lindsay Nothrup; pond at Gungahlin Dr/Well Station Rd

**Purple-crowned Lorikeet** *Glossopsitta pusilla* Status uncertain

4; 14 Dec 2013; Kim Farley Larmour & Geoff Larmour; Lyttleton Cres, Cook

2; 14 Dec 2013; Nicki Taws; Lyttleton Cres, Cook

2; 8 Apr 2014; Barbara Allan; Hannaford St, Page

1; 9 Apr 2014; Barbara Allan; The Pinnacle NR, Hawker



**Purple-crowned Lorikeet (Barbara Allan)**

**Singing Honeyeater** *Lichenostomus virescens*

1; 3 Dec 2013; John Bundock; pond at Masterman St'Leverrier Cres, Bruce

**Black Honeyeater** *Sugomel niger*

4; 29 Jan 2014; Michael Lenz; TSR48, Gundaroo

4; 19 Feb 2014; Michael Lenz & Nick Nicholls; TSR48, Gundaroo

**Little Friarbird** *Philemon citreogularis*

6; 6 Mar 2014; Malcolm Fyfe; Barry Drive, Civic

**Painted Honeyeater** *Grantiella picta*

1; 19 Dec 2002; Ron Johns; Uriarra Crossing East

**Plum-headed Finch** *Neochmia modesta*

1, 22-25 Mar 2014; David Marshall; Lake Ginninderra E. Probable escapee.

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## **Canberra Bird Notes**

Canberra Bird Notes is published three times a year by the Canberra Ornithologists Group Inc and is edited by Michael Lenz. Major articles of up to 5000 words are welcome on matters relating to the status, distribution, behaviour or identification of birds in the Australian Capital Territory and surrounding region. Please discuss any proposed major contribution in advance. Shorter notes, book reviews and other contributions are also encouraged. All contributions should be sent to [cbn@canberrabirds.org.au](mailto:cbn@canberrabirds.org.au).

Please note that the views expressed in the articles published in Canberra Bird Notes are those of the authors. They do not necessarily represent the views of the Canberra Ornithologists Group. Responses to the views expressed in CBN articles are always welcome and will be considered for publication as letters to the editor.

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